Exhibit 6

**IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
TYLER DIVISION**

SFA SYSTEMS, LLC,	:	
	:	
PLAINTIFF,	:	
	:	
v.	:	Civil Action No. 6:07-cv-00067
	:	Jury Trial Demanded
INFOR, et al.,	:	
	:	
DEFENDANTS.	:	

EXPERT REPORT OF DANIEL E. COOKE, PH.D.

May 7, 2009

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Introduction and Scope of Engagement

1. My name is Daniel E. Cooke, Ph.D, and I have been asked to provided my opinion in the captioned matter.

2. I am a full professor of computer science and the Paul Whitfield Horn Professor in the Department of Computer Science and Director of the Center for Advanced Intelligent Systems at Texas Tech University in Lubbock, Texas. I have been a professor in computer science since 1986. In my position I am responsible for research and teaching. I currently teach a standard full-time faculty course load for an active research faculty member of one course per semester, including the supervision of Ph.D. and Master of Science students. My research, in accordance with the mission of the university, covers fundamental and practitioner-focused research in the areas of declarative languages and software engineering. A copy of my CV further describing my background and experience is attached in Appendix A.

3. I have been retained by the law firm of Blank Rome LLP, ("Infor's counsel" or "counsel for Infor") representing Infor Global Solutions (Michigan), Inc. ("Infor") in the captioned matter, *SFA Systems, LLC f/k/a Triton IP, LLC v. Infor Global Solutions (Michigan), Inc., et al.*, civil action no 6:07-CV-067[LED] (E.D. Tex.).

4. My hourly rate for work on this matter is $275 per hour plus expenses. My compensation is not dependent upon the content of this report or the outcome of this matter.

5. I have been asked to present my opinions regarding the technology and validity of U.S. Patent No. 6,067,525 entitled "Integrated Computerized Sales Force Automation System" ("the '525 Patent"), specifically my opinion regarding the technology and validity of the claims of the '525 Patent asserted by SFA Systems, LLC ("SFA").

Background and Qualifications

6. I have more than 32 years of experience in computer science and related technology fields, including my education, teaching, and developing information systems.

7. Since 1986 I have worked in the Advanced Technology Department of General Dynamics; as an Assistant Professor at Texas Christian University; and as an Assistant, Associate, and Full Professor/Chair at the University of Texas at El Paso. From 1999

through 2005, I served as Professor and Chair of the Computer Science Department at Texas Tech University, and since 2001 as the Director of the Center for Advanced Intelligent Systems. Presently, I serve as the Paul Whitfield Horn Professor of Computer Science and Director of the Center for Advanced Intelligent Systems at Texas Tech University.

8.   In 2000, the Associate Center Director of the National Aeronautics and Space Administration (NASA) Ames Research Center asked Texas Tech University that I be allowed to serve as the founding Manager of NASA's Intelligent Systems Program. In this capacity, I established the technical content of the program, authored the initial solicitations, obtained funding for over 90 initial research projects for Intelligent Systems. I was responsible for the program from formulation to implementation, and established a program office for this activity at NASA Ames Research Center in Mountain View, California, where I was a member of the Center Director's executive staff. In 2001, I received the NASA Ames Research Center Information Sciences Award for leadership in establishing a Model National Strategic Research Initiative for NASA. In 2002, I received the NASA Exceptional Achievement Medal and the NASA Group Award, for Contributions to the CICT program.

9.   I have published more than 85 technical papers, some of which are described in my attached CV, in the areas of computer language design and software engineering. I have served as principal investigator or co-principal investigator on research grants totaling more than $10 million, edited many journal special issues, published a book on Computer Language Design, edited a book on Computer Aided Software Engineering, and served in executive positions for 15 international conferences or workshops. In 2006 Texas Tech University elected me to be a Paul Whitfield Horn Professor. I have been an American Electronics Association Fellow, a MacIntosh Murchison Faculty Fellow, and held the MacIntosh-Murchison Chair in Engineering at U.T. El Paso. In 1996, I was the recipient of the University of Texas at El Paso's Distinguished Achievement in Research Award.

10.   I also serve as Area Editor, Formal Methods, International Journal of Software Engineering and Knowledge Engineering; Area Editor, Software, and advisory board member for IEEE Computer; Editor, International Journal of Semantic Computing; and

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Chair, Scientific Advisory Council for the USRA Research Institute for Advanced Computer Science at NASA Ames Research Center.

11.   The opinions that I express in this report are my own and are based upon methodologies commonly used by me and/or in my profession.

Preparation for this Report and Trial Testimony

12.   In forming my opinions, I have reviewed the '525 Patent (the claims and specification) and its prosecution history. I have also reviewed and considered the materials attached hereto as Appendix B in forming my opinions, and I have also relied on my personal knowledge of the field relevant to the '525 Patent.

13.   Should this matter go to trial, I plan to use one or more exhibits or computerized presentations summarizing or supporting the opinions made in this report. I may, for example, use a PowerPoint slide show in summary and support of my opinions. The slide show may include materials taken directly from this report or a summary of those materials. I may also use any of the materials I have relied on in generating this report and other materials related to this matter as exhibits at trial, and I may highlight or otherwise summarize those exhibits to assist me in explaining my opinions.

14.   This matter is continuing and I may render additional opinions based on my continuing review of relevant materials and the testimony of others. I reserve the right to revise and augment my opinions as my work on this matter continues. Additionally, as discovery is ongoing I reserve the right to supplement this report.

Summary of Findings

15.   It is my opinion, based on my knowledge, training, skills, experience, and on my analysis of the '525 patent and prosecution history, the Court's claim construction and the prior art listed here that:

Written Description and Enablement

16.   The application that ultimately issued as the '525 Patent does not provide adequate written description (i) to demonstrate that the inventors had possession of the claimed invention, or (ii) to enable the claimed invention. In particular, there is no disclosure for

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(i) what "inferring" is, and (ii) how "inferring" is made or used in the invention of the application as filed.

17.   The '525 patent discloses no working or even prophetic examples of a sales system or method that *infers the occurrence of an event*, that is, the logical process by which the fact that the event has occurred is derived by application of logical rules.

18.   The application that ultimately issued as the '525 Patent does not provide adequate written description (i) to demonstrate that the inventors had possession of the claimed invention, or (ii) to enable the claimed invention. In particular, there is no disclosure for an *expert system* as it would have been understood by one skilled in the art at the time the application was filed.

Anticipation and Obviousness

19.   Filepp et al. U.S. Pat. No. 5,347,632 anticipates asserted Claims 1-3, 5, 7, 20, 24, 34, and 40.

20.   Long et al. U.S. Pat. No. 5,117,354 anticipates asserted Claims 1-3, 5-8, 10, 12, 20, 24, 34, 35, 37 and 40.

21.   Lockwood U.S. Pat. No. 4,567,359 anticipates asserted 1-3, 5-7, 20, 24, 34, and 40.

22.   Deaton U.S. Pat. No. 5,201,010 anticipates asserted Claims 1-3, 5-8, 10, 12, 20, 24, 34, 35, 37 and 40.

23.   Cragun U.S. Pat. No. 5,774,868 anticipates asserted Claims 1-3, 5-8, 10, 12, 20, 24, 34, 35, 37 and 40.

24.   Gorog U.S. Pat. No. 4,947,028 anticipates asserted Claims 1-3, 5-7, 20, 24, 34, and 40.

25.   Stone, Robert W. & Good, David J. *Expert Systems and Sales Strategies*, Association of Computer Machinery 089791-416-3/90/0010/0052 anticipates asserted Claims 1-3, 5-8, 10, 12, 20, 24, 34, 35, 37 and 40.

26.   Spezialetti, Madalene, *An Approach to Reducing Delays in Recognizing Distributed Event Occurrences*, Association of Computer Machinery 0-89791-457-0/91/0011/0155 renders all claims obvious, either alone or in combination with other references herein.

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27.   It also would have been obvious for one of ordinary skill to practice the asserted claims in view of any one of, or a combination of, U.S. Pat. No. 5,347,632, U.S. Pat. No. 5,117,354, U.S. Pat. No. 4,567,359, U.S. Pat. No. 5,201,010, U.S. Pat. No. 5,774,868, U.S. Pat. No. 4,947,028, Stone, Robert W. & Good, David J. *Expert Systems and Sales Strategies*, Association of Computer Machinery 089791-416-3/90/0010/0052, Spezialetti, Madalene: *An Approach to Reducing Delays in Recognizing Distributed Event Occurrences*, Association of Computer Machinery 0-89791-457-0/91/0011/0155.

28.   Further, the above identified prior art could be combined with one or more other pieces of prior art, including patents and publications from the sales force automation industry, to practice the asserted claims. Among other reasons, because such prior art was known to those practicing in the other fields such as the operating systems and event driven real-time systems and because it was directed to solving similar problems, one of ordinary skill in the art would have had sufficient teaching, suggestion, or motivation to combine such prior art with the integrated systems, e.g. as described in both Negrino references listed in Appendix B. Further, variations on existing integrated information systems based on this prior art would have been predictable to one of ordinary skill in the art, and combinations of this prior art simply reflect the use of a known technique to improve similar methods or products in the same way.

29.   The following sections of this report explain the basis and provide additional detail for these opinions.

The Applicable Law: Invalidity

30.   I am not an attorney, but have set forth below some of the background law that I understand the jury and Court must apply in considering the validity of the '525 Patent. I understand from Infor's counsel that the following law is applicable with regard to the validity of a United States Patent. I have applied this law to the facts in this matter in my research and in rendering my opinions.

Presumption of Validity

31.   I understand that a patent is presumed valid.

Burden of Proof

32.   I also understand that clear and convincing evidence is required to invalidate a patent.

Lack of Written Description Support (35 U.S.C. § 112)

33.   I have been informed by counsel, and I understand the written description requirement is intended to ensure that the inventors disclose at the time of filing the technological knowledge upon which the patent is based and demonstrate that the patentee was in possession, at the time of filing the application, of the invention that is claimed. Consequently, the disclosure in the patent document must clearly allow persons of ordinary skill in the art to recognize that the applicant invented what is claimed and was in possession of the invention at the time of filing including all elements and limitations. Accordingly, I understand that a patent claim is invalid if the inventors of the '525 Patent failed to describe the claimed system or claimed method at the time of filing.

34.   Counsel has further informed me and I understand that the written description inquiry is not whether one skilled in the art might be able to construct the patentee's device from (i) the teachings of the disclosure, or (ii) the knowledge of one skilled in the art. Rather, the written description, standing on its own, must show that the inventors were in possession of the invention.

Lack of Enablement (35 U.S.C. § 112)

35.   I have been informed by counsel, and I understand that a patent claim is invalid if the application that issued as the patent fails to adequately enable a person of ordinary skill in the art to make and use the invention. Accordingly, I understand that a patent claim is invalid if the inventors of the '525 Patent failed to adequately enable some way of making the claimed system or performing the claimed method at the time of filing.

Anticipation (35 U.S.C. § 102)

36.   I understand that a patent claim is invalid when anticipated by the prior art. The standards for anticipatory prior art are set out in 35 U.S.C. § 102, which is reproduced in pertinent part below:

(a)   The invention was known or used by others in this country or Patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for Patent.

(b)   The invention was Patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of the application for Patent in the United States.

<p style="text-align:center">*   *   *</p>

(c)   The invention was described in ... (2) a Patent granted on an application for Patent by another filed in the United States before the invention by the applicant for Patent ....thereof by the applicant for Patent.

<p style="text-align:center">*   *   *</p>

(d)   the invention was described in (1) an application for patent, published under section 122(b) [35 USC 122(b)], by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) [35 USC 351(a)] shall have the effects for the purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language; or

<p style="text-align:center">*   *   *</p>

(e)   ...(2) Before such person's invention thereof, the invention was made in this country by another inventor who had not abandoned, suppressed, or concealed it In determining priority of invention under this subsection, there shall be considered not only the respective dates of conception and reduction to practice of the invention, but also the reasonable diligence of one who was first to conceive and last to reduce to practice, from a time prior to conception by the other.

37.   I understand that a patent constitutes prior art under 35 U.S.C. § 102(b) if it was issued more than one year before the patent in suit was filed. I understand that a prior

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application constitutes prior art under 35 U.S.C. § 102(e) (2) if a patent is granted on an application for patent by one other than the inventor filed in the United States before the invention by the applicant for patent.

38.   I understand that the phrase "printed publication" means sufficiently accessible to the public interested in the art, and depends upon dissemination and accessibility. To be "known or used by others in this country" under § 102(a), the knowledge or use must be public. Dissemination for purposes of determining whether a reference is a "printed publication" does not necessarily require establishing that it had been disseminated by the distribution of reproductions or copies and/or indexed in a library or database. To establish anticipation under 35 U.S.C. § 102 in light of a printed publication or a patent, the printed publication or patent must disclose each element of the claim at issue. Counsel has advised me that a patent is a printed publication for purposes of 102(a).

39.   I understand that a reference that does not expressly disclose a claim limitation may nevertheless "inherently" disclose the limitation if the expressly missing matter is necessarily present in the system or method described in the reference. The disclosure must be sufficient to show that the natural result flowing from the operation of the system or method disclosed in the reference would require the missing matter or result in the performance of a missing step. Inherent anticipation does not require that a person of ordinary skill in the art at the time would have recognized the inherent disclosure.

40.   To establish anticipation, the reference must disclose every element of the patent claim at issue, either explicitly or inherently. Also, the anticipating reference must enable one skilled in the art to make and use the apparatus or method without undue experimentation. Anticipation does not require actual performance of the invention.

Obviousness (35 U.S.C. § 103)

41.   I understand that a patent claim is invalid if it is obvious in view of prior art. I understand that the obviousness standard is provided by 35 U.S.C. § 103, which is reproduced in pertinent part below:

   (a)   A patent may not be obtained though the invention is not identically disclosed or described as set forth in Section 102 of this title, if the differences between the

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subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made. 35 U.S.C. § 103(a).

42. In determining whether or not a patented invention would have been obvious, I understand from counsel that the following factors should be considered:

- The scope and content of the prior art;
- The differences between the prior art and the claims at issue;
- The level of ordinary skill in the art; and
- Any secondary considerations that may be present.

43. Further, I have been advised by counsel that the following instructions should be considered when evaluating the factors listed above:

- Whether the improvement is more than a predictable use of prior art elements according to their established functions;
- The interrelated teachings of multiple patents; the effect of demands known to the design community or present in the marketplace; and the background knowledge possessed by a person having ordinary skill in the art; all in order to determine whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue;
- The analysis need not seek out precise teachings directed to the specific subject matter of the challenged claim but can take account of the inferences and creative steps that a person of ordinary skill in the art would employ;
- Under the correct analysis, any need or problem known in the field of endeavor at the time of invention and addressed by the patent can provide a reason for combining the elements in the manner claimed; and
- Common sense teaches that, in many cases, a person of ordinary skill will be able to fit the teachings of multiple patents together like pieces of a puzzle; a person of ordinary skill is a person of ordinary creativity

44. I also understand from counsel that there are various rationales that support conclusions of obviousness.

- Combining prior art elements according to known methods to yield predictable results;

- Simple substitution of one known element for another to obtain predictable results;

- Use of known technique to improve similar methods or products in the same way;

- Applying a known technique to a known method or product ready for improvement to yield predictable results;

- Obvious to try or choosing from a finite number of identified, predictable solutions, with a reasonable expectation of success;

- Known work in one field of endeavor may prompt variations of it for use in either the same field or a different one based on design incentives or other market forces if the variations would have been predictable to one of ordinary skill in the art: and

- Some teaching, suggestion, or motivation in the prior art that would have led one of ordinary skill to modify the prior art reference or to combine prior art reference teachings to arrive at the claimed invention.

45.   Further, I understand that a single reference combined with the knowledge of one skilled in the art may render a patent claim obvious, under one or more of the rationales listed above.

46.   I understand that certain "secondary considerations" may be relevant to the issue of obviousness, and that these secondary considerations may include commercial success, if that success is due to the invention; long-felt need for the invention; evidence of copying of the claimed invention; industry acceptance; initial skepticism; and praise of the invention.

Relevant Dates

47.   I understand that the filing date of the original application that ultimately issued as the '525 Patent is October 30, 1995.

48.   I have been asked by Infor's counsel to assume that the date for purposes of 35 U.S.C. § 102(a) for prior art to the '525 Patent "before the [such] invention thereof" is October

30, 1995. Accordingly, the critical date for prior art to the '525 Patent for purposes of U.S.C. § 102(b) is October 30, 1994.

Claim Construction

49.   I understand that the Court entered an order regarding claim construction the '525 Patent terms on February 23, 2009. The Court's constructions were as follows:

Table 1: '525 Patent Claim Term and Constructions

Claim Term	Construction
"changes in state characteristic of an event"	a change in a unique configuration of information within the system that is indicative of the occurrence of an event within the system
"context"	information already existing within the system that becomes relevant upon the occurrence of an event
"event manager"	hardware and/or software
"expert system"	a software program operating on a set of rules which can be automatically updated based upon successful sales approaches
"inferring"	logical process by which a factual conclusion is derived from known facts by the application of logical rules
"inferring . . . a context in which the event occurred"	logical process by which the fact that information already existing within the system that becomes relevant upon the occurrence of an event is derived by application of logical rules
"inferring occurrence of an event"	logical process by which the fact that an event has occurred is derived by application of logical rules

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Claim Term	Construction
"subsystem"	a system that is part of a larger system

50.   I applied the Court's constructions in my analysis, and concluded that the asserted claims are invalid.

Level of Skill in the Art

51.   For purposes of this report, I have concluded that a person of ordinary skill in the art of the claimed subject matter of the '525 Patent is a person who has, through education or practical experience, the equivalent of a Bachelor's Degree in Computer Science and 2-3 years of experience in programming business process automation and information systems.

52.   More specifically, it is my opinion that the person of ordinary skill in the art of the claimed subject matter of the '525 Patent has practical experience or training so that she or he could understand the architecture, development, implementation of the systems of the '525 patent, and execution of computer systems that perform the methods of the '525 Patent.

53.   I have applied this level of ordinary skill in the art for my opinions when required. My expertise in the fields of the '525 Patent includes being at least one of ordinary skill in the art, as described above, in my curriculum vitae, and at my biographical listing at the university www.cs.ttu.edu. I also have experience working with individuals "of ordinary skill in the art" in the computer software and information systems industry and consultants to the computer software and information systems industry and with Computer Scientists at NASA. I have also had course participants in my computer science graduate school courses and continuing education programs who qualify as one of "ordinary skill in the art."

54.   Additionally, I was directly involved in the development of software for information systems from 1979-1984.

Summary Review of the '525 Patent Description and the Asserted Claims

55.   The field of the '525 Patent entitled "Salesforce Automation" is described in the first sentence of the Background of the Invention in the patent as:[1]

"The present invention is directed to a sales force automation system and, more particularly, to an automates sales system which facilitates the sale of an item or service by intelligently integrating into a single system tools used by a salesperson in the sales process."

56.   The patent applicants noted in their description of the Background of the Invention that, "Most conventional sales systems have been implemented in a limited manner and are typically directed solely to a particular event, task or small subset of tasks in the sales process."[2]

57.   The patent applicants also noted that "[s]uch conventional sales automation systems are often developed by separate vendors and, as described above, the vendors develop the systems in consideration of only that portion of the overall sales process in which the sales automation system is to be used. As a result, the different systems are oftentimes incompatible with one another. . . . The use of multiple, often incompatible sales tools throughout the sales process increases the costs associated with making the sale and lessens the likelihood of making the sale by diminishing the impact of the sales presentation and by failing to effectively use all of the information available to the salesperson."[3]

58.   The patent applicants' description of the Background of the Invention also includes the statement: "[c]onventional attempts to couple different sales tools together have also failed to appreciate the overall sales process."[4]

59.   The Summary of the Invention, noting that the patent teaches system for facilitating a sales process, states:[5]

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[1]   '525 Patent, col. 1; lines 5-9.

[2]   '525 Patent, col. 1; lines 10-13.

[3]   '525 Patent, col. 1; lines 48-61.

[4]   '525 Patent, col. 1; lines 62-64.

"In one particular embodiment, the present invention is implemented in the form of a computer sales system which is used to facilitate a sales process. The system includes a plurality of subsystems each corresponding to a phase of the sales process to facilitate one or more events occurring in the corresponding phase of the sales process. The system also includes an event manager coupled to each of the subsystems which recognizes an event carried out by one of the subsystems, determine [sic] the context in which the recognized event occurs and automatically initiate [sic] an operation in a another [sic] subsystem to facilitate a new event in the sales process on the basis of the context in which the recognized event occurs."

60.   The Summary of the Invention goes on to state:[6]

"In accordance with a another [sic] aspect of the invention a sales process may be facilitated by using a computer to facilitating [sic] an event occurring in the sales process using a subsystem adapted to facilitate the event. The computer automatically detects the occurrence of the event and determines the context in which the event occurs. The computer further automatically initiates an operation using another subsystem of the computer to facilitate a new event based on the context in which the first event occurred."

61.   The Summary of the Invention concludes with:[7]

"Still another aspect of the invention is implemented in the form of a computer implemented sales system which includes a plurality of subsystems each electronically facilitating an event occurring in the sales process. An event manager is coupled to each of the plurality of subsystems to detect the occurrence of an event in the sales process, to link the event in the sales process with a second event in the sales process based on prior sales experience sing the sales system. The system automatically initiate [sic] an operation using one of the plurality of subsystems to facilitate the second event[.]"

62.   The '525 Patent has 43 claims. The Plaintiff has asserted that Infor infringes Claims 1-3, 5-8, 10, 12, 20, 24, 34, 35, 37, and 40-42. The asserted claims read as follows:

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5   '525 Patent, col. 2; lines 22-34.

6   '525 Patent, col. 2; lines 35-43.

7   '525 Patent, col. 2; lines 44-54.

63.   Claim 1 reads: A computer implemented sales system used to facilitate

a sales process, the system comprising:

a plurality of subsystems configured to facilitate one or

more actions performed during at least one phase of the

sales process; and

an event manager, coupled to the subsystems, the event

manager

detecting one or more changes in state characteristic of

an event occurring within the system,

inferring occurrence of the event and a context in which

the event occurred based at least in part on the

detected changes in state, and

automatically initiating an operation in one or more

particular subsystems of the computer to facilitate a

new action based on the inferred context.

64.   Claim 2 reads: A system as recited in claim 1, wherein the inferred

context includes information related to at least one phase of

the sales process.

65.   Claim 3 reads: A system as recited in claim 1, wherein the inferred

context includes information related to whether a previous

event has occurred in the sales process.

66.   Claim 5 reads: A system as recited in claim 1, wherein the plurality of

subsystems comprises:

a time with customer subsystem configured to convert a

lead to a buying customer, so as to close a sale; and

a lead generation subsystem configured to convert a name

to a potential customer.

67.   Claim 6 reads: A system as recited in claim 1, wherein the plurality of

subsystems comprises; [sic]

a time with customer subsystem configured to convert a

lead to a buying customer, so as to close a sale; and

an order management subsystem configured to convert the

sale such that a product or service delivered matches a

product or service sold.

68.   Claim 7 reads: A system as recited in claim 1, wherein the plurality of

subsystems comprises:

a time with customer subsystem configured to convert a

lead to a buying customer, so as to close a sale; and

a customer retention subsystem configured to convert an

existing customer into a lead, so as to generate repeat

sales.

69.   Claim 8 reads: A system as recited in claim 1, wherein the plurality of

subsystems comprises:

a time with customer subsystem configured to convert a

lead to a buying customer and prompting the buying

customer to make a buying decision, so as to close a

sale; and

a self management subsystem configured to assist a

salesperson in managing sales information.

70.   Claim 10 reads: A system as recited in claim 1, wherein the plurality

of subsystems comprises:

a time with customer subsystem configured to convert a

lead to a buying customer, so as to close a sale; and

a sales management subsystem configured to assist a sales

manager in managing a plurality of salespeople.

71.   Claim 12 reads: A system as recited in claim 1, wherein the plurality

of subsystems comprises:

a lead management subsystem configured to manage a

conversion of a lead to a prospect and of the prospect

to a buying customer, and

a self management subsystem configured to assist a

salesperson in managing sales information.

72.   Claim 20 reads: A method of facilitating a sales process using a

computer arrangement having a plurality of subsystems

configured to facilitate one or more actions performed

during at least one phase of the sales process, the method

comprising the steps of:

automatically detecting one or more changes in state

characteristic of an event occurring in the sales process;

inferring occurrence of the event and a context in which

the event occurred based at least in part on the detected

changes in state; and

automatically initiating an operation in one or more

particular subsystems of the computer to facilitate a

new action based on the inferred context.

73.   Claim 24 reads: A method as recited in claim 20, wherein the inferred

context includes information related to at least one phase of

the sales process.

74.   Claim 34 reads: A method as recited in claim 20, further comprising

the steps of:

inferring occurrence of an event while converting a lead

to a buying customer; and

using the particular subsystem to convert an existing

customer into a lead, so as to generate repeat sales.

75.   Claim 35 reads: A method as recited in claim 20, further comprising

the steps of:

inferring occurrence of an event while converting a lead

to a buying customer and prompting the buying cus-

tomer to make a buying decision; and

using the particular subsystem to assist a salesperson in

managing sales information.

76.   Claim 37 reads: A method as recited in claim 20, further comprising

the steps of:

inferring occurrence of an event while converting a lead

to a buying customer; and

using the particular subsystem to assist a sales manager in

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managing a plurality of salespeople.

77.   Claim 40 reads: A computer implemented sales system used to facili-

tate a sales process, the system comprising:

a plurality of subsystems configured to electronically

facilitate actions performed during the sales process;

and

an event manager coupled to the subsystems and config-

ured to

detect one or more changes in state characteristic of an

event occurring in the system,

infer occurrence of the event and a context in which the 20

event occurred based at least in part on the detected

changes in state,

link the inferred event with an action to be performed

during the sales process based on prior sales expe-

rience using the sales system, and

automatically initiate an operation using one or more of

the plurality of subsystems to facilitate the action to

be performed based on the inferred context.

78.   Claim 41 reads: A system as recited in claim 40, wherein the event

manager comprises an expert system.

79.   Claim 42 reads: A system as recited in claim 40, wherein the event

manager comprises an expert system configured to

automatically monitor events occurring in the sales

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process,

identify which events lead to a desired outcome in a use

of the sales system, and

produce a knowledge database for use in subsequent

operations as the prior sales experience using the sales

system.

File History

80.   My analysis included a review of the prosecution history for the '525 Patent including the references cited. At trial, I may discuss the prosecution history including:

- claim amendments and applicants' arguments made within the prosecution history;
- the change in examiners and how the inconsistency between claims and specification arose; and
- that the patent examiner's reasons for allowing claim 1-43 focus on an event manager that infers an event.

81.   In the claims of the '525 Patent as originally filed, the verb "inferring" was presented in the independent claims as "determining" and "recognizing."

82.   To overcome claim rejections, the inventors amended the phrase to use the verb "inferring."

83.   Based on this amendment, the inventors argued for patentability over the Negrino prior art reference cited by the PTO.

84.   In a later Reply, the inventors argued that:

> Negrino's steps do not include inferring the context, and it would be impermissible to use hindsight to find that Negrino 1 includes contextual inferences in the sentence 'A sales plan spells out… Also, keeping a database of information about clients, including detailed contact history, …, is not referring to making contextual inferences of events.

85.   Thereafter, the PTO allowed the amended claims, based on these arguments and finding that the prior art did not include "inferring context."

Summary of Opinions Regarding the Invalidity of the '525 Patent

Lack of Written Description Support (35 U.S.C. § 112)

86.   It is my opinion that U.S. Application No. 08/550,089 ("the '089 Application"), which issued as the '525 Patent, does not reasonably convey to one of ordinary skill in the art that the inventors of the '525 Patent had possession, at the time the '089 Application was filed, of the claimed invention as issued. As a result, the asserted claims lack adequate written description.

87.   In reaching my conclusion, I reviewed the entire '089 Application, including its specification and the originally submitted claims. The specification in the application is essentially the same as the specification that issued in the '525 Patent.

88.   The '089 Application does not convey to one skilled in the art that the '525 inventors possessed: (1) a system that "infers"; (2) "backward" inferring, i.e. inferring that an event has occurred in the past (as opposed to "forward" inferring, i.e., inferring what the next action should be); or (3) an expert system as understood by one skilled in the art in 1995.

89.   I have noted that the critical term "infer" – in any of its verb forms – does not appear anywhere in the '089 Application.

90.   The Court construed "inferring" as the "logical process by which a factual conclusion is derived from known facts by the application of logical rules".

91.   My understanding of the meaning of "inferring," based on the claim language, the Court's construction, and my knowledge and understanding of the art is that "inferring" requires the addition of facts or knowledge to the system, i.e. the derivation of new facts, previously unknown to the system, based on the application of logical rules to known facts.

92.   This understanding of the term "inferring" is consistent with the typical understanding of those with ordinary skill in the art when the application was filed and today. See, e.g., "Inference: The logical process by which new facts are derived from known facts by the

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application of inference rules." Foldoc On Line Dictionary of Computing, 2008, www.foldoc.org; "Inference: A process of deriving new facts from facts already known, by means of the rules of logic." CCI Computer, Online HighTec Dictionary, 2008 www.computeruser.com.

93. The '089 Application does not include any disclosure related to using rules to acquire additional knowledge. In contrast, the '089 Application only discloses the use of standard conditional logic by the system. Standard conditional logic consists of if/then statements of the form if condition x is true then take step y. More specifically, the system only applies logical rules to known facts in order to algorithmically direct next steps. It does not, however, apply logical rules to known facts to derive factual conclusions, i.e. to add new knowledge to the system.

94. In sum, nothing in the '089 Application discloses that the inventors possessed an invention that derived factual conclusions from known facts by the application of logical rules at the time the '089 Application was filed.

95. Moreover, to the extent the '089 Application contains any disclosure relating to inferring, it does not disclose any system, feature, or function relating to any backward inference, i.e. inferring that an event has occurred, which is literally required by the claims.

96. The claims of the '525 Patent first call out "an event occurring within the system," then require that the system infer "occurrence of the event." I understand from counsel that, due to the requirements for antecedent basis in patent claim drafting, the occurrence of the event inferred must necessarily be the event occurring within the system that is characterized by the detected change in state.

97. I understand that under patent law, the antecedent basis requirement requires that any item that is called out specifically in a claim by a definite object (e.g. "the"), must have previously been identified as an element of the claimed invention and introduced by an indefinite article (e.g., "a").

98. Based on the antecedent basis requirement, when the claim requires that the system infer the occurrence of "the" event, the event that is inferred must be the event occurring

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within the system characterized by the detected change in state, because that is the only event previously identified.

99.   Based on this understanding, it is clear that the claimed system must make a "backward" inference, that is, it must infer the occurrence of an event occurring within the system characterized by the detected change in state. The claimed invention is not making a "forward" inference, that is, inferring what the next action should be.

100.   The '089 Application does not disclose "backward" inferring. The '089 Application teaches an event-driven system that, through the use of logical rules, directs next steps based on events. Thus, to the extent the '089 Application makes any disclosure of "inferring," this disclosure is limited to forward-looking inferring, i.e. taking a condition, applying logical rules, and determining a next step. For example, the specification describes some rules that may be applied by an inference engine such as "IF proposal exists for product THEN send letter; IF insufficient down payment THEN no letter; IF location is Midwest THEN send letter." '525 Patent, col. 34 ln. 32-34.

101.   All of these examples are using rules to determine the next steps to be taken; none add new knowledge to the system.

102.   Therefore, the '089 Application does not convey to one skilled in the art that the inventors of the '525 Patent possessed a system capable of "backward" inferring at the time of filing the '089 Application.

103.   I understand that the Court construed "expert system" as "a software program operating on a set of rules which can be automatically updated based upon successful sales approaches."

104.   To the extent the meaning of the term "expert system" in the claims is limited to the expert system as construed by the Court, this "expert system" appears adequately described in the '089 Application.

105.   This understanding of an "expert system" is not consistent with the understanding of an "expert system" that one skilled in the art would have had in 1995.

106.   In 1995, one skilled in the art would have understood an expert system to be comprised of: (1) a knowledge base and (2) an inference engine. The knowledge base further

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includes: (1) facts and (2) rules. The inference engine of this expert system uses rules to add data to the system or to gain knowledge, not to identify next steps to take algorithmically. Susan J. Hazen, Sachi Sakthivel & John R. Slater, *On Selecting Appropriate Technology for Knowledge Systems; Expert Systems and Artificial Neural Network Knowledge System Technologies*, 44 J. of Sys. Mgmt. 10 (1993). Furthermore, no mention is made in the specification that the inference engine was to be forward chaining or backward chaining.

107.   The '089 Application does not convey to one skilled in the art that the inventors of the '525 Patent possessed an expert system as would have been understood by one skilled in the art in 1995.

108.   My analysis is based on the Court's claim construction, the '525 Patent, and the "Encyclopedia of Computer Science" by Ralston and Reilly 1993.

Lack of Enablement (35 U.S.C. § 112)

109.   It is my opinion that U.S. Application No. 08/550,089 ("the '089 Application"), which issued as the '525 Patent, does not enable a person of ordinary skill in the art to make and use the invention claimed in the '525 Patent. As a result, the asserted claims lack adequate enabling disclosure.

110.   In reaching my conclusion, I reviewed the entire '089 Application, including its specification and the originally submitted claims. The specification in the application is essentially the same as the specification that issued in the '525 Patent.

111.   The '089 Application does not describe: (1) a system that "infers"; (2) "backward" inferring, i.e. inferring that an event has occurred in the past (as opposed to "forward" inferring, i.e., inferring what the next action should be); or (3) an expert system as understood by one skilled in the art in 1995 in sufficient detail to enable one skilled in the art to make and use a system with any of these three elements.

112.   As discussed in detail above, the specification of the '089 Application does not disclose or describe any of these elements. In addition, none of these elements, as construed by the Court and as they are used in the claims, would be readily understood by one skilled in the art in 1995.

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113.   Because the use of the these terms in the '525 Patent and as construed by the Court differs from the understanding of one skilled in the art, it is not possible to make and use the invention without a substantial disclosure of specifically how to make and use the invention in accordance with the patentee's definitions of these terms.

114.   Thus, it is my opinion that one skilled in the art would need a significantly more detailed specification in order to make and use: (1) a system that "infers"; (2) backward inferring, i.e. inferring an event that occurred in the past; or (3) an expert system as understood by one skilled in the art in 1995.

Anticipation (35 U.S.C. § 102) and Obviousness (35 U.S.C. § 103)

115.   As I discussed above, the determination of patentability under 35 U.S.C. § 102 and § 103 requires a comparison of the claimed subject matter with the prior art. If this comparison indicates that there are no differences between the elements of the claimed invention and a single prior art system or reference, then the claims are invalid under 35 U.S.C. § 102 as lacking novelty. Otherwise, it is necessary to determine if the claimed subject matter would have been obvious to one of ordinary skill in the art at the time the invention was made. If so, then the claimed subject matter is invalid under 35 U.S.C. § 103.

116.   A review of the prior art is, thus, critical to the determination of patentability. Four exemplary prior art sources include:

- domestic patents;
- foreign patent documents;
- nonpatent literature (NPL); and
- evidence of actual salesforce automation systems.

117.   Accordingly, my analysis regarding the validity of asserted Claims 1-3, 5-8, 10, 12, 20, 24, 34, 35, 37, and 40-42 of the '525 Patent included a review of domestic patents, foreign patent documents, the nonpatent literature, and evidence of actual operational systems that perform the relevant methods. I considered all four sources when evaluating each of the asserted claims.

118.   Before providing my findings regarding anticipation and obviousness for specific prior art, below I provide a synopsis of the history of the field relevant to the '525 Patent, and

the state of the art when the '089 Application was filed. Although it is not comprehensive, this synopsis is intended to provide an overview of what one of ordinary skill in the art would have known at the time. The synopsis is also intended to assist the Court or the jury in understanding key events, systems, companies relevant to the '089 Application. In particular, this synopsis demonstrates that the methods and apparatus recited in the asserted claims of the '525 Patent were simply a logical progression of event driven systems and salesforce automation systems.[8]

A Summary History of Information Technology and Computer Software With Respect To the '525 Patent

119.   One of the ways of analyzing and understanding the '525 Patent, the '089 Application, and the asserted claims, is to consider the methods of the patent in an overall context of the history of information technology and computer software used for salesforce automation.[9] A "look back" at the history is relevant because it provides a framework for the prior art (discussed below) as well as a general background on the actions of the Defendants which have been accused by the Plaintiff of infringing Claims 1-3, 5-8, 10, 12, 20, 24, 34, 35, 37, and 40-42 of the '525 Patent.

Event Driven Systems

120.   Computer systems with operating systems have been using event driven architectures for more than thirty years. The technique of using "events" and "event managers" to sequentially process and respond to any individual event is a classic method to control the operation of a multithreaded, multi-component system. This technique is well known in the computer programming and system development art. For example, the Quartermann reference listed in Appendix B describes the Unix Kernel in terms similar to '525 Patent "Event Manager."

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[8]   My discussion in this section broadly covers salesforce automation systems. I do not purport to provide any opinion on the accused Infor software, and whether that software infringes the asserted claims of the '525 Patent.

[9]   There are several sources for information regarding the history of computing. For example, see computerhistory.org.

121.   Other event driven systems and entities similar to the event manager described in '525
        Patent that respond to states of a system have been described in the literature since the
        1960's. For example, the Garlan reference listed in Appendix B describes "[a]n event
        system … consists of a set of components and an event manager. The event manager,
        EM, is a binary relation associating events and methods that should be invoked when that
        event is announced. Thus, … when an event is announced, all methods related to it by
        EM are invoked in the corresponding components." In the Spezialetti reference listed in
        Appendix B, there is also a discussion of an event manager as described in '525.

122.   Event driven systems with event managers have also been described in a variety of
        domains including distributed systems, embedded real-time systems, computer graphics,
        and digital signal processing, prior to the filing date of the '089 Application. These
        "event managers" are based on detecting changes of states within the system, and initiate
        appropriate actions in response to such change of state. Indeed, there are numerous
        articles and other sources of information that indicate that the teachings of the '525 Patent
        (particularly those concerning the event manager) were known to the public prior to the
        filing date of October 30, 1995. A Google Scholar search for papers written between
        1960 and 1994 with the terms "event manager" and "software" returns more than 10,000
        papers in many areas of computer science, including signal processing, embedded
        systems, operating systems, distributed processing, and graphics.

Salesforce Automation Software

123.   Automation of the salesforce coincided with the automation of business process in
        general in the early 1990's. Aspects of sales processes, such as capturing the initial lead,
        learning about the prospect's needs, making a sales presentation, submitting and refining
        a bid, and finally closing the sale are starting to become automated with the advent of
        wide spread use of computer systems in business. Computer programs were initially
        introduced to facilitate individual sales tasks like contact management, product
        configuration, and order management. By early 1990's, sales-automation software
        integrated features from address book managers, calendar programs, word processors,
        and other standard business tools. Information within one feature of the software can be
        used to initiate activities in another feature of the software. For example, the software

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can automatically schedule a follow-up call when a sales person sends a letter to a client. Scheduled and completed client contact can be linked to client history. Some programs even support sales plans, which are highly structured strategies that are customizable for a particular business. A sales plan spells out every step of the sales process and directs one or more sales people to perform certain tasks based on the outcome of the previous step. Many integrated sales automation software packages were commercially available at the time. See Negrino references listed in Appendix B.

Conclusions Regarding Software Technology at the Time of Filing of the '525 Patent

124.   It is apparent that the software technology through the 1980's provided more than a sufficient foundation for companies to develop a plurality of subsystems each configured to facilitate a phase of the sales process, which are coupled to an event manager that would monitor states within the plurality of subsystems and detect event occurrences within the plurality of subsystems and initiate actions based on such detected events. Also, outcome of previous events can be used to direct the response to a future event.

125.   All of the important components of the '525 Patent existed in integrated forms as described in '525 Patent prior to the critical date of the '525 Patent.

126.   These articles along with the other references cited above provided information relating to the '525 Patent and would have provided suggestions, motivation, and teachings to a skilled artisan who could have combined one or more of them along with other prior art to practice the asserted claims. In addition, one skilled in the art when trying to solve the problem posed by the inventors of the '525 would have a finite number of predictable solutions with predictable outcomes.

Prior Art Analysis

127.   As noted above, my analysis regarding the validity of asserted Claims 1-3, 5-8, 10, 12, 20, 24, 34, 35, 37, and 40-42 of the '525 Patent included a review of domestic patents, foreign patent documents, non-patent literature, relevant scholarly literature, and evidence of actual operational systems that perform the relevant methods. I considered all of these sources when evaluating each of the asserted claims.

128.   I considered the prior art and found several references that anticipate and/or render obvious the asserted claims.

129.   I discuss this prior art below and include claim charts in Appendix C to this report. I note, as well, that one of ordinary skill in the art would have been aware of other prior art that I reference above.

130.   The specific prior art that I discuss below and for which I provide claim charts includes:

- Filepp et al. U.S. Pat. No. 5,347,632 anticipates asserted Claims 1-3, 5, 7, 20, 24, 34, and 40.
- Long et al. U.S. Pat. No. 5,117,354 anticipates asserted Claims 1-3, 5-8, 10, 12, 20, 24, 34, 35, 37 and 40.
- Lockwood U.S. Pat. No. 4,567,359 anticipates asserted 1-3, 5-7, 20, 24, 34, and 40.
- Deaton U.S. Pat. No. 5,201,010 anticipates asserted Claims 1-3, 5-8, 10, 12, 20, 24, 34, 35, 37 and 40.
- Cragun U.S. Pat. No. 5,774,868 anticipates asserted Claims 1-3, 5-8, 10, 12, 20, 24, 34, 35, 37 and 40.
- Gorog U.S. Pat. No. 4,947,028 anticipates asserted Claims 1-3, 5-7, 20, 24, 34, and 40.
- Stone, Robert W. & Good, David J. *Expert Systems and Sales Strategies*, Association of Computer Machinery 089791-416-3/90/0010/0052 anticipates asserted Claims 1-3, 5-8, 10, 12, 20, 24, 34, 35, 37 and 40.
- Spezialetti, Madalene, *An Approach to Reducing Delays in Recognizing Distributed Event Occurrences*, Association of Computer Machinery 0-89791-457-0/91/0011/0155 renders all claims obvious, either alone or in combination with the other references herein.

U.S. 5,347,632 (Filepp)

131.   I considered and analyzed U.S. Patent No. 5,347,632 ("the '632 Patent"). The '632 Patent was "known or used by others" in the United States prior to the October 30, 1994 critical date for the '525 Patent.

132.   Filepp teaches an interactive computer system that enables a user to perform desired
        transactions such as banking and shopping. In one embodiment, a reception system, with
        operating software acting as an event manager, is coupled to a plurality of subsystems,
        such as partitioned applications and object processing means for selecting and retrieving
        objects, and interpreting and executing the partitioned applications.

133.   The event manager detects changes in state, such as user inputs, or physical events, such
        as RETURN entry, data entry, or mouse clicks in particular fields. These inputs, and data
        associated with these inputs, cause the event manager to interpret or infer the occurrence
        of events within the system. The events inferred can be that a transaction is desired, or
        the type of transaction desired, or the type of customer, or group of customers, to target
        the transaction inferred, or to target the advertisement for a desired transaction. For
        example, from system and input data, queues of advertisements are constructed that target
        either individual users, or a set of users, who fall into certain groups according to various
        parameters.

134.   The operation automatically initiated in a subsystem is the retrieval of specified system
        objects into the partitioned applications, where the retrieved objects are contextually
        relevant to the creation of advertisements in the partitioned applications. The retrieved
        objects are therefore contexts existing within the system that become relevant upon
        occurrence of the event. The selection of contexts for use in the creation of the
        advertisements are inferred by logical process and rules based at least in part on the
        detected changes in state. Object retrieval facilitates the action of advertisement creation
        within the partitioned application, and the subsequent action is based on the inferred
        objects retrieved.

135.   The foregoing description is by way of example only and is intended to illustrate, in
        general terms, the functionality of the described system to provide context. As I discuss
        in the claim chart, it is my opinion that under the Court's constructions, the asserted
        Claims 1-3, 5, 7, 20, 24, 34, and 40 of the '525 Patent are anticipated by the '632 Patent
        under 35 U.S.C. § 102 (a) and (b). It is also my opinion that the remaining asserted
        claims are obvious in view of the '632 Patent, either alone or in combination with other
        references herein.

136. A detailed analysis of how this reference anticipates and/or renders obvious the asserted claims of the '525 Patent is provided in Appendix C, pages 1-50.

U.S. Pat. No. 5,117,354 (Long et al.)

137. I considered and analyzed U.S. Patent No. 5,117,354 ("the '354 Patent"). The '354 Patent was "known or used by others" in the United States prior to the October 30, 1994 critical date for the '525 Patent.

138. This patent teaches systems for the pricing and ordering of goods, so that sales representatives can obtain pricing information, and place orders for the goods. In Long, a variety of sales representatives in the field are each equipped with a personal computer, acting as respective subsystems, each having processing capabilities, local memory and long term storage. The subsystems may be installed at the office locations of the sales representatives or may be portable units which are carried in the field. The subsystems are coupled to an event manager that is a processor of a host computer and includes software that looks for mail placed in the host mailbox from any of the subsystems. The host computer, during its polling of requests and other items placed in its mailbox, detects changes in state (e.g., sensing that an inquiry or order has been placed by a sales representative).

139. The manufacturer host then decodes each item on the order, inquiry or quote request, and prices each item. The event manager logically derives event occurrence (i.e., that an order has been placed, relative to a general inquiry, or verification that an accurate and fillable order has been placed). Contexts logically derived as relevant upon the occurrence of the event are inventory data, accounting, credit, and/or and pricing information. The host system can reassemble the file as a price quoted for transmittal. The automatic operation in a subsystem is a provision of a price quote facilitating the action of forwarding the quote to the customer.

140. The foregoing description is by way of example only and is intended to illustrate, in general terms, the functionality of the described system to provide context. As I discuss in the claim chart, it is my opinion that under the Court's constructions, the asserted Claims 1-3, 5-8, 10, 12, 20, 24, 34, 35, 37 and 40 of the '525 Patent are anticipated by the '354 Patent under 35 U.S.C. § 102 (a) and (b). It is also my opinion that the remaining

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asserted claims are obvious in view of the '354 Patent, either alone or in combination with other references listed herein.

141. A detailed analysis of how this reference anticipates and/or renders obvious the asserted claims of the '525 Patent is provided in Appendix C, page 51-80.

U.S. Pat. No. 4,567,359 (Lockwood)

142. I considered and analyzed U.S. Patent No. 4,567,359 ("the '359 Patent"). The '359 Patent was "known or used by others" in the United States prior to the October 30, 1994 critical date for the '525 Patent.

143. This patent describes a computerized system applied to many types of customer service and sales industries that includes one or more self-service and sales terminals; for example, to automatically dispense insurance quotations and policies. The system includes a central data processing center acting as an event manager and coupled to various subsystems, such as remote insurance company terminals, transaction terminals, motor vehicle service bureaus, and credit information and bank terminals for the preparation, verification and forwarding of insurance quotations and policy executions.

144. The central processor detects changes in state, such as, for example, receipt of an insurance quote request. The processor logically infers the type of quote requested.

145. Upon the inferred occurrence of this event, certain contexts within the system become relevant; namely, the appropriate insurance rating information necessary to facilitate the action of calculating insurance cost calculations and generating of policies. The relevant rating information inferred as relevant is based at least in part on the detected changes of state (i.e., receipt of an insurance quote request). The operation automatically initiated in a subsystem is the location of the applicable insurance rating information in respective insurance company terminal subsystems.

146. The foregoing description is by way of example only and is intended to illustrate, in general terms, the functionality of the described system to provide context. As I discuss in the claim chart, it is my opinion that under the Court's constructions, the asserted Claims 1-3, 5-7, 20, 24, 34, and 40 of the '525 Patent are anticipated by the '359 Patent under 35 U.S.C. § 102 (a) and (b). It is also my opinion that the remaining asserted

claims are obvious in view of the '359 Patent, either alone or in combination with other references herein.

147.   A detailed analysis of how this reference anticipates and/or renders obvious the asserted claims of the '525 Patent is provided in Appendix C, pages 81-108.

U.S. Pat. No. 5,201,010 (Deaton)

148.   I considered and analyzed U.S. Patent No. 5,201,010 ("the '010 Patent"). The '010 Patent was "known or used by others" in the United States prior to the October 30, 1994 critical date for the '525 Patent.

149.   This patent teaches a method and system for performing targeted marking to infrequent shoppers by generating an offer coupon based upon the occurrence of an event (e.g., a transaction involving a customer contact event. The system includes a plurality of subsystems, referred to as transaction terminals, which include an automatic check reader, a bar code reader, and a coupon dispenser. Coupled to the subsystems is a transaction processor, acting as an event manager, that also accesses customer database information.

150.   The transaction terminals are used to transmit a customer information request (e.g., check transaction verification) from the point of sale to the transaction processor. In addition to performing a check verification status, the system collects and accumulates selected and current additional transactional data. Customer data can include frequency of purchases and dollar amounts spent over specified intervals (such as Day/Week/Month/Quarter/Total), along with other historical information such as departments shopped, products purchased and the like.

151.   The transaction processor detects a change of state; for example, detects the transmission of a check transaction verification request. This state change is indicative of an event, such as a purchase transaction or a determination of type of customer. The event manager infers the event through a logical process using rules, for example, inferring the particular store departments in which the purchased products are located, and/or inferring which products or store departments are particularly absent from past or current transactions.

152.   In one aspect, the transaction processor monitors sales activities, for example, assessing whether or not items have been purchased from a meat department, dairy department or deli. Triggered by this event and based upon stored customer data, a decision is made whether to award a coupon to the customer, and/or what type of coupon to award. For example, if data within the system indicates over a period of time that a shopper shows a consistent failure to shop at the delicatessen, then certain actions will follow. For example, when the customer's check is scanned into the check reader, the processor interrogates the customer's history and automatically initiates a coupon dispenser subsystem to generate a coupon to induce the customer to shop at the delicatessen. The coupon provided to the customer, the resulting action, is based upon inferred contexts. These contexts include general customer profile data, past purchase and transactional data and associated department identifiers, along with current purchase and transactional data. The change in state detected then forms the basis for the inference of which contexts become relevant upon occurrence of the event.

153.   The foregoing description is by way of example only and is intended to illustrate, in general terms, the functionality of the described system to provide context. As I discuss in the claim chart, it is my opinion that under the Court's constructions, the asserted Claims 1-3, 5-8, 10, 12, 20, 24, 34, 35, 37 and 40 of the '525 Patent are anticipated by the '010 Patent under 35 U.S.C. § 102 (a) and (b). It is also my opinion that the remaining asserted claims are obvious in view of the '010 Patent, either alone or in combination with other references herein.

154.   A detailed analysis of how this reference anticipates and/or renders obvious the asserted claims of the '525 Patent is provided in Appendix C, pages 109-199.

U.S. Pat. No. 5,774,868 (Cragun)

155.   I considered and analyzed U.S. Patent No. 5,774,868 ("the '868 Patent"). The '868 Patent was "known or used by others" in the United States prior to the October 30, 1994 critical date for the '525 Patent.

156.   This patent describes generally an automated sales promotion selection system having a computer system, including a main processor, acting as an event manager, that is coupled to and communicates with one or more subsystems. Such systems include neural

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network subsystems (such as a purchase advisor), customer information devices, and billing terminals. All naturally facilitate one or more actions performed during the sales process.

157. As items are purchased in a store, the recorded transaction information is detected by the processor as a change in state indicative of an event occurring within the system. The event is an inferred determination of the purchase class(es). After detecting a purchase transaction, the processor analyzes the collected purchase transaction information to segment the items purchased and infer purchase classes that comprise groups of items ordinarily purchased together.

158. Upon the inference of purchase class(es), an operation is automatically initiated in the neural network subsystem(s) to identify items that are missing from the purchase transaction that are members of the respective inferred purchase class that otherwise would likely be represented in the purchase transaction. The missing items are identified relative to contexts derived as relevant upon the occurrence of an event. These contexts include the purchase transaction item information and the class definitions used to delineate the purchase class(es). A subsequent action based on the inferred context(s) would be a purchase suggestion for one or more of the missing items, and/or an automatically dispensed coupon, and/or another sales promotion dispensed by output device, such as a printer or display terminal.

159. In this way, the sales promotion selection system automatically collects purchase transaction data, analyzes the data relating to a particular customer purchase transaction, and uses neural networks to select a sales promotion calculated to result in additional purchases.

160. The foregoing description is by way of example only and is intended to illustrate, in general terms, the functionality of the described system to provide context. As I discuss in the claim chart, it is my opinion that under the Court's constructions, the asserted Claims 1-3, 5-8, 10, 12, 20, 24, 34, 35, 37 and 40 of the '525 Patent are anticipated by the '868 Patent under 35 U.S.C. § 102 (a) and (b). It is also my opinion that the remaining asserted claims are obvious in view of the '868 Patent, either alone or in combination with other references herein.

161.   A detailed analysis of how this reference anticipates and/or renders obvious the asserted claims of the '525 Patent is provided in Appendix C, pages 200-264.

U.S. Pat. No. 4,947,028 (Gorog)

162.   I considered and analyzed U.S. Patent No. 4,947,028 ("the '028 Patent"). The '028 Patent was "known or used by others" in the United States prior to the October 30, 1994 critical date for the '525 Patent.

163.   Gorog discloses the integration of existing devices, products, and networks to make the process of buying and selling merchandise significantly more efficient. The process of Gorog selects the merchant/supplier, confirms the availability of inventory to fulfill the sale, confirms the price, method of payment, and credit status of the consumer, as well as the delivery date and method of delivery.

164.   An automated order and payment sales system, comprising a central data processing means with communication capability adapted to receive information from a plurality of remote programmable data input/output means. Software of an order computer terminal (OCT) acts as an event manager, and is coupled to remote device subsystems, including the various keypad, readers, display devices, and other peripheral equipment.

165.   The OCT software detects a change in state when receiving an incoming order packet. The change of state is indicative of an event (i.e., that a valid and fulfillable order has been placed). Order packet data is divided into order data (i.e., information relating to the merchant, identification of the goods or services, and the amount of items desired) and payment data. Processing software infers the occurrence of a valid and fulfillable order, based upon records of inventories provided by participating businesses, or by sending a query to other computers holding the necessary data records for participating businesses, and by verifying payment mediums selected. Upon occurrence of the event, the software logically derives relevant contexts based upon the detected changes in state (i.e., receiving the incoming order packet). Contexts include inventory data and credit data, as described above.

166.   Automatically initiated operations include transmission of order data and payment authorization information among the subsystems, and to product/service providers, all facilitating the action of completing and satisfying the order.

167.   The foregoing description is by way of example only and is intended to illustrate, in general terms, the functionality of the described system to provide context. As I discuss in the claim chart, it is my opinion that under the Court's constructions, the asserted Claims 1-3, 5-7, 20, 24, 34, and 40 of the '525 Patent are anticipated by the '028 Patent under 35 U.S.C. § 102 (a) and (b). It is also my opinion that the remaining asserted claims are obvious in view of the '028 Patent, either alone or in combination with other references herein.

168.   A detailed analysis of how this reference anticipates and/or renders obvious the asserted claims of the '525 Patent is provided in Appendix C, pages 265-293.

Stone, Robert W. & Good, David J. Expert Systems and Sales Strategies, Association of Computer Machinery 089791-416-3/90/0010/0052

169.   I considered and analyzed Stone, Robert W. & Good, David J. Expert Systems and Sales Strategies ("the Stone publication"). The Stone publication was "known or used by others" in the United States prior to the October 30, 1994 critical date for the '525 Patent.

170.   The Stone publication describes an application of artificial intelligence (e.g., expert systems) to a process occurring along a business value chain (e.g., marketing and sales organizations). The application teaches the implementation of an expert system into the computerized reservation system of a Resort Hotel. The event manager is the processor of the computer reservation system. Subsystems coupled to the event manager are the expert system and peripheral computer system components.

171.   Databases of the system consist of all the hotel's guest records for each guest's stay during the past years. The system relies on three factors. First, the continual updated history on each guest and the guest's stay in the hotel. Second, a complete listing of each room in the hotel and the characteristics of the room. Finally, a listing of the management's operation and sales strategies for the hotel. This information provides contexts for the present system.
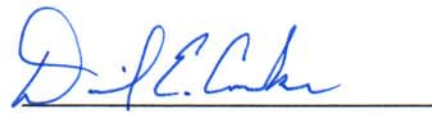
172.   When a returning guest calls the hotel, to inquire about vacation opportunities or to make a reservation, the system detects a change in state. The reservationist enters the individual's name into the reservation system. Using the guest's name, the system produces a display containing the guest's previous stays, if any, and their preferences with respect to room characteristics, from past records. The event inferred, through a logical process using rules, is whether the guest is a past guest, and/or that the guest is interested in making a reservation. Upon the inferred occurrence, certain contextual information (described above) is derived as relevant based at least in part on the detected change in state.

173.   The reservationist then switches to a second display that is a form to enter the guest's present needs or interests. Given the information regarding previous stays and current room preferences and each room's characteristics, the expert system is automatically triggered to suggest available rooms during the proposed stay of the guest. These suggestions are rooms which best fit the inferred contexts, i.e., the guest's preferences and needs, while satisfying the hotel's management and sales strategies. The expert system operation facilitates the action of presenting the suggestion(s) to the caller.

174.   The foregoing description is by way of example only and is intended to illustrate, in general terms, the functionality of the described system to provide context. As I discuss in the claim chart, it is my opinion that under the Court's constructions, the asserted Claims 1-3, 5-8, 10, 12, 20, 24, 34, 35, 37 and 40 of the '525 Patent are anticipated by the Stone publication under 35 U.S.C. § 102 (a) and (b). It is also my opinion that the remaining asserted claims are obvious in view of the Stone publication, either alone or in combination with other references herein.

175.   A detailed analysis of how this reference anticipates and/or renders obvious the asserted claims of the '525 Patent is provided in Appendix C, pages 294-322.

Spezialetti, Madalene: An Approach to Reducing Delays in Recognizing Distributed Event Occurrences

176.   I considered and analyzed Spezialetti, Madalene: An Approach to Reducing Delays in Recognizing Distributed Event Occurrences ("the Spezialetti publication"). The

Spezialetti publication was "known or used by others" in the United States prior to the October 30, 1994 critical date for the '525 Patent.

177.   Spezialetti teaches an approach to reduce the internal system delay in event recognition by incorporating knowledge about the characteristics of behaviors to be recognized in an evaluation process. In the system an event manager/monitor is disclosed at each processor in which a component of a particular event is located. This event manager/monitor maintains information pertaining to the states of each component of the event located at that processor.

178.   In the system, users can describe activities of interest in the form of event definitions. These definitions are predicates which test the states of various system elements. The activity of the elements specified by an event definition is monitored, and data pertaining to their activity collected for analysis. Data is organized into computation state views, and event definitions are evaluated in terms of states of their operands. When the behavior of the computation fulfills the specification of its definition, an inference that the event has occurred takes place.

179.   While the Spezialetti publication does not specifically disclose a use of its' teachings directed to a sales process; however, one of ordinary skill would certainly recognize the advantages provided by event recognition based upon detected changes in state, and predictably adapt the disclosures to a sales system.

180.   The foregoing description is by way of example only and is intended to illustrate, in general terms, the functionality of the described system to provide context. As I discuss in the claim chart, it is my opinion that under the Court's constructions, the Spezialetti publication renders all claims obvious, either alone or in combination with other references herein.

181.   A detailed analysis of how this reference renders obvious the asserted claims of the '525 Patent is provided in Appendix C, pages 323-331.

182.   I reserve the right to supplement my report to add any newly discovered information or evidence regarding these prior art systems and/or any newly identified prior art systems. I

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also reserve the right to supplement this report as my research continues, including
responding to the Plaintiff's arguments.

Daniel E. Cooke, Ph.D
May 7, 2009

Appendix A
Curriculum Vitae

Daniel E. Cooke, PhD

EDUCATION

1984-1986   PhD in Computer Science, University of Texas at Arlington.
1977-1978   Master of Computing Science, Texas A&M University.
1973-1977   Bachelor of Science (*Summa Cum Laude*), Sam Houston State University.

HONORS AND MEMBERSHIPS IN PROFESSIONAL SOCIETIES

IEEE Computer Society's Technical Achievement Award for Advances in Computer Languages, resulting in SequenceL, 2006.

The NASA Exceptional Achievement Medal: in recognition of extraordinary service and dedication to NASA and to the Ames Research center as the first manager of the newly created Intelligent System Program, presented by Sean O'Keefe, NASA Administrator, June 2002.

NASA Group Award, for Contributions to the CICT program. Presented by Sean O'Keefe, NASA Administrator, June 2002.

NASA Ames Research Center, Information Sciences Award for Leadership in Establishing a Model Strategic Research Initiative for NASA. Presented by Dr. Harry McDonald, Director of the NASA Ames Research Center and Dr Steven Zornetzer, Director of Information Sciences and Technology, November, 2001.

American Men and Women of Science, 1998
Who's Who in Science and Engineering, 1998
ASME Energy Week Frank Walk Award, 1997
ASME Energy Week Frank Walk Award, 1996
Society of Design and Process Science Service Award, 1996
University Distinguished Achievement in Research Award 1996
ASME ECTE 1995 Service Award
ASME Petroleum Division Ralph James Award, 1993
ASME ECTE, Service Award, 1993
MacIntosh-Murchison Faculty Fellow, 1990-1992
American Electronics Association Fellow, 1984-86
Senior Member IEEE, 1996
Member, IEEE Computer Society
Sigma Xi – Scientific Research Society
Tau Beta Pi – Engineering Honor's Society
Upsilon Pi Epsilon – Computer Science Honor's Society
Alpha Chi – Undergraduate Honor's Society

PROFESSIONAL EXPERIENCE

3/2008 – present

  Paul Whitfield Horn Professor of Computer Science
  Director of Center for Advanced Intelligent Systems
  Texas Tech University

1/2006 – 3/2008

  Professor Computer Science Department
  Director of Center for Advanced Intelligent Systems
  Texas Tech University

9/2001 – 12/2005
> Professor and Chairman of Computer Science Department
> Director of Center for Advanced Intelligent Systems
> Texas Tech University

3/2000 – 8/2001
> Professor and Chairman of Computer Science Department
> Texas Tech University and
> Program Manager for NASA's National Strategic Initiative for Intelligent
> Systems – budgeted at $350,000,000.
>
> NASA Program Manager Responsibilities – Defined the technical content of a National Initiative to advance Computer Science Research in fundamental areas deemed to be critical to NASA's future exploration and science missions. Authored the initial program plan and research announcements, organized and assembled the program management team, which included 20 NASA researchers and staff, selected and funded the first 90 research projects, guided the program from formulation to implementation stages, which involved program reviews and presentation and confirmation from the NASA Headquarters Program Review Council. Conducted major research workshop to define challenge problems relevant to NASA's research needs. Presented program plan at major NASA centers and to the technical community. Identified projects throughout NASA centers with which the program researchers are to team. Completed activity with a successful review by the White House Office of Management and Budget which deemed the Intelligent Systems Initiative a Model Strategic Research Program for NASA. Member of Senior Management Staff at NASA Ames Research Center.

1999 – 2/2000   Professor and Chairman of Computer Science Department, Texas Tech University.

1996 – 1998 Professor and Chairman of Computer Science Department, Chief Computer Scientist of the Pan American Center for Earth and Environmental Studies, The University of Texas at El Paso.

1995 – 1996 Tenured Associate Professor of Computer Science and Chairman of Computer Science Department, Chief Computer Scientist of the Pan American Center for Earth and Environmental Studies, The University of Texas at El Paso.

1993 – 1995   Tenured Associate Professor of Computer Science, The University of Texas at El Paso.

1992 – 1993   Tenured Associate Professor of Computer Science, and Graduate Advisor, The University of Texas at El Paso.

Summer 1991 – 1992
> Visiting Research Professor at Naval Postgraduate School

1987 – 1992   Assistant Professor of Computer Science and Graduate Advisor,

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(Responsibilities as Graduate Advisor include complete administration of the C.S. graduate program), The University of Texas at El Paso.

1986   Assistant Professor of Computer Science, Texas Christian University and Senior Software Engineer, Advanced Technology Department, General Dynamics, Corp.

1984 – 1986   Assistant Instructor of Computer Science, The University of Texas at Arlington.

1982 – 1984   Instructor of Computer Science, Hardin-Simmons University. CICS Programming Experience.

1980 – 1982   Systems Analyst, Data Processing Center, Texas A&M University. IMS DC/DB Programming Experience.

1979 – 1980   Research Associate, Computer Science Department, Texas A&M University.

1977 – 1978   Graduate Assistant in Teaching, Computer Science Department, Texas A&M University.

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RESEARCH CONTRACTS - Texas Tech University
 1. Investigator: Control Software, Water Reclamation, Nanotechnology, Autonomous Inspection and
         Salad Crop Culture, NASA, $83,384, October, 2006 – September, 2009. **(Center for Advanced
         Intelligent Systems)**
 2. Investigator: Control Software, Water Reclamation, Nanotechnology, Autonomous Inspection and
         Salad Crop Culture, NASA, $95,296, October, 2006 – September, 2009. **(Space Sciences
         Institute)**

 3. Investigator: Control Systems, Water Recovery, Human Factors, and Plant Growth Research,
         NASA, $103,136, July, 2006 – September, 2008. **(Center for Advanced Intelligent Systems)**
 4. Investigator: Control Systems, Water Recovery, Human Factors, and Plant Growth Research,
         NASA, $103,136, July, 2006 – September, 2008. **(Space Sciences Institute)**
 5. Investigator: Control Systems, Water Recovery, Human Factors, and Plant Growth Research,
         NASA, $218,470, September, 2005 – September, 2006. **(Computer Science Department)**

 6. Investigator: Configurable Embeddable Adaptive Computing Systems for Multiple Application
         Domains, DARPA, $124,664, June, 1997 – December 2001. **(Computer Science Department)**

 7. Investigator: "Development of a Parallel Codes for Image Restoration and SequenceL
         Experiments Related to Image Restoration," NASA Headquarters, $17,753, May, 2000 –
         April, 2001. **(Computer Science Department)**

 8. Investigator: "Exploiting Computational Mobility for Space Exploration," NASA/University
         of West Florida, $25,838, July, 2003 – June, 2004. **(Computer Science Department)**

 9. Investigator: "IPA Agreement," NASA Ames Research Center, $328,788, June 2000 –
         August, 2001. **(Computer Science Department)**

10. Investigator: Master/USA Dual Project Administration, United Space Alliance in Houston,
         TX. $5,000, October, 1999 – March, 2002. **(Computer Science Department)**

11. Investigator: "Plant Research in the EDU," NASA-JSC. $218,212, October, 2002 –
         September, 2003. **(Computer Science Department)**

12. Investigator: "Plant Research in the EDU, Water Reuse/Recycling, Locomotion in Simulated
         Partial Gravity, and Human Centered Computing" NASA, $201,398. October, 2003 –
         September, 2005. **(Computer Science Department)**

13. Investigator: "Research for High Dependability Software Engineering" City of Abilene, TX.
         $42,345, September, 2002 – August, 2003. **(Computer Science Department)**

14. Investigator: "Center for Excellence in Engineering Graduate Studies and Research in
         Abilene" Development Corporation of Abilene, TX, $422,322, July, 2001 – June, 2006.
         (Computer Science Department)

15. Investigator: "Yield Tracker: A Yield Mapping and Prediction Information Delivery
         System" USDA, $310,445. September, 2000 – September, 2004. **(Computer Science
         Department)**

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RESEARCH CONTRACTS – University of Texas at El Paso
Principal Investigator: National Security Agency: SequenceL. $100,000. 1998

Principal Investigator: Umbrella Grant with UTEP and United Space Alliance in Houston, TX.
$100,000. 1997

Co-PI: NASA Pan American Center for Earth and Environmental Studies UTEP 1995-2000
($6,500,000).

Principal Investigator: "The Formal Definition of an Inherently Unambiguous Specification
Language," U.S.A.F. Office of Scientific Research #F49620-93-1-0152. 1993 - 1994
($80,000).

Co-PI: NASA Ames Research NAG 2-670 Supp #2, 1992 - 1994 ($71,000).

Co-PI: Materials Research Center of Excellence, National Science Foundation
1991-1993 ($200,000).

Co-PI: National Science Foundation CISE Computer Science Dept. UTEP 1991-1995
($1,500,000).

Principal Investigator: "The Formal Definition of an Inherently Unambiguous Design
Methodology," U.S.A.F. Office of Scientific Research #F49620-89-C-0074. 1989 -
1992 ($184,000).

Principal Investigator: "A Plan for a National Center for Computer Aided Software
Engineering," U.S. Navy, Office of Naval Research # N60921-89-C-A182   1989 - 1990
($31,000).

Co-PI: NSF CISE CDA/NSGFG Instrumentation Grant for Research *A Multiprocessor Platform
for Cross-Disciplinary Research in Parallel Systems,* with Drs. Gates and Teller.
Awarded. 12/97-11/98. $71,000.

INVITED TALKS
1. "Proving Properties of a CASE Tool," Texas A&M University, hosted by Dr. John
Leggett, April 16, 1990.

2. "Issues in Computer Aided Software Engineering," University of California, Berkeley,
hosted by Professor C.V. Ramamoorthy, April 30, 1990.

3. "Issues in CASE Technology Transfer," IEEE CASE '90 Fourth International Workshop,
Irvine, California, December 6, 1990.

4. "The Development of a Requirement Specification Language," Texas A&M University,
hosted by Dr. John Leggett, February 6, 1991.

5. "Logic and Software Engineering," Panelist, Third International Conference on Software
Engineering and Knowledge Engineering, June 1991.

6. "Ambiguity in Software Engineering," Panelist, Third International Conference on Software Engineering and Knowledge Engineering, June 1991.

7. "Expert Systems in Program Verification," Space Grant Consortium, Austin, Texas, June 18, 1991.

8. "An Overview of CASE," Naval Postgraduate School, hosted by Dr. Luqi, July-August, 1991.

9. "Program Synthesis: Generalizations for the Purpose of Program Synthesis," Naval Postgraduate School, hosted by Dr. Luqi, July-August, 1991.

10. "Program Synthesis: Languages L2 and DecSpec Purpose of Program Synthesis," Naval Postgraduate School, hosted by Dr. Luqi, July-August, 1991.

11. "Program Synthesis: Ambiguity Issues," Naval Postgraduate School, hosted by Dr. Luqi, July-August, 1991.

12. "Is Artificial Intelligence the Answer for Software Engineering?" Panelist, Third IEEE Tools for Artificial Intelligence Conference, San Jose, CA, November, 1991.

13. "Software Automation Issues," 1992 IEEE International Conference on Systems Integration, Morristown, New Jersey, June 15, 1992.

14. "Novel Approaches to Systems Integration," 1992 IEEE International Conference on Systems Integration, Morristown, New Jersey, June 16, 1992.

15. "An Introduction to BagL," Naval Postgraduate School, hosted by Dr. Luqi, August, 1992.

16. "An Application of CAPS to Support Software Maintenance," Naval Postgraduate School, hosted by Dr. Luqi, August, 1992.

17. "Formal Methods in CASE," IEEE CASE Fifth International Workshop, Montreal, Canada, June 8, 1992.

18. "Software Engineering Support for Program Generation and Maintenance," Research Analysis and Maintenance, hosted by Ray Day, August, 1992.

19. "Knowledge Acquisition and Process Acquisition," IEEE Tools With Artificial Intelligence 1992, Arlington, Virginia, November, 1992.

20. "A High Level Language Based Upon Multisets," University of Houston College Park, hosted by Ernst Leiss, February 4, 1993.

21. "On Developing a General Theory of Software Engineering," COMPSAC '93 Panel Session with Daniel E. Cooke, Luqi, J. Urban, P. Bobbie, C.V. Ramamoorthy, November 4, 1993.

22. "An Introduction to BagL," University of Pittsburgh, hosted by Alfs Berztiss, April 15, 1994.

23. "The Future of Software Engineering," University of Nevada, hosted by Chair's Search Committee, March, 1995.

24. "Constructs for Processing Nonscalars," New Mexico State University, hosted by Gopal Gupta, April, 1995.

25. "The Future of Software Engineering Education," International Conference on Software Engineering and Knowledge Engineering - Panel Session with Joe Urban, Daniel E. Cooke, Doris Carver, and Roland Mittermeir, June, 1995.

26. "A Software Architecture for the Analysis of Remotely Geographic and Remotely Sensed Data," Daniel E. Cooke, 1995 Monterey Workshop on Formal Methods, September, 1995.

27. "An Introduction to the SequenceL Language," Daniel E. Cooke, New Technologies Seminar, NASA Ames Research Center, May, 1997.

28. "An Introduction to the SequenceL Language," Daniel E. Cooke, Technology Seminar, NASA Goddard Space Flight Center, August, 1997.

29. "A Distributed Version of the SequenceL Language," Daniel E. Cooke, New Technologies Seminar, NASA Ames Research Center, August, 1998.

30. "SequenceL and Engineering Automation," Daniel E. Cooke, Monterey Formal Methods Workshop, Carmel, California, October, 1998.

31. "Intelligent Systems Program," Daniel E. Cooke, NASA Ames Research Center, June, 2000.

32. "Intelligent Systems Program," Daniel E. Cooke, Johnson Spaceflight Center, August, 2000.

33. "Intelligent Systems Program," Daniel E. Cooke, Marshall Spaceflight Center, August, 2000.

34. "Intelligent Systems Program," Daniel E. Cooke, Goddard Spaceflight Center, September, 2000.

35. "Intelligent Systems Program," Daniel E. Cooke, NASA Headquarters, September, 2000.

36. "Intelligent Systems Program," Daniel E. Cooke, AIAA Space, 2000, Long Beach, California, September, 2000.

37. "Intelligent Systems Program," Daniel E. Cooke, Louisiana Technology Summit, Baton Rouge, Louisiana, October, 2000.

38. "Intelligent Systems Program," Daniel E. Cooke, IT Research at NASA, Carnegie-Mellon University, Pittsburgh, Pennsylvania, October 31, 2000.

39. "Information Systems Technologies for Future Space Exploration," Daniel E. Cooke, American Astronautical Society National Conference, Houston, Texas, November 25, 2000.

40. "Issues Concerning the Future of Computer Science" Daniel E. Cooke, HASE 2000, Albuquerque, New Mexico, November, 2000.

41. "Automated Parallelisms in SequenceL," Daniel E. Cooke, RIACS Seminar, November, 2000, NASA Ames Research Center.

42. "Intelligent Systems Program," Daniel E. Cooke, Mission Relevancy Review, NASA Ames Research Center, Mountain View, California, January 4-5, 2001.

43. "Intelligent Systems Program," Daniel E. Cooke, Space Science Enterprise Briefing, NASA Headquarters, Washington D.C., January 30, 2001.

44. "Intelligent Systems Program," Daniel E. Cooke, Program Management Council Briefing, NASA Headquarters, Washington D.C., March 1, 2001.

45. "NASA's Role in Computer Science and Software Engineering Research," Daniel E. Cooke, Keynote, Software Engineering Society Workshop, Pasadena, California, June 10, 2001.

46. "Specification of a Parallelizing SequenceL Compiler," Daniel E. Cooke, Monterey Formal Methods Workshop, Monterey, California, June 19, 2001.

47. "Intelligent Systems Program Review," Harry McDonald and Daniel E. Cooke, Office of Management and Budget, White House, Washington D.C., August 23, 2001.

48. "Future of Spaceflight," Daniel E. Cooke and Douglas R. Cooke, Annual Fundraiser for Insights Science Museum, El Paso, Texas, September 7, 2001.

49. "Overview of the Intelligent Systems Program," Daniel E. Cooke, Texas A&M University Colloquium, October 26, 2001.

50. "The Role of Artificial Intelligence in Future Space Exploration," Daniel E. Cooke, Keynote, *IEEE Tools with Artificial Intelligence,* Dallas, Texas, November 7, 2001.

51. "Computer Science Research at NASA," Daniel E. Cooke, Luncheon Speaker at the Business Computing Organization in Abilene, Texas, October, 2002.

52. "Computer Science Research at NASA," Daniel E. Cooke, Evening Lecture for Student Computing Organizations for Universities and Colleges in Abilene, Texas, October, 2002.

53. "Overview of the Intelligent Systems Program," Daniel E. Cooke, University of Texas at Dallas Colloquium, November 9, 2001.

54. "SequenceL Parallelisms," Daniel E. Cooke, University of Texas at Dallas Colloquium, November 9, 2001.

55. "Projecting our Presence in Space and in Time," Daniel E. Cooke, Explorer's Club Banquet, Cloudcroft, New Mexico, August 17, 2002.

56. "Exploration: Proofs and Paths from the Book," Daniel E. Cooke, NASA Intelligent Systems Program Workshop Banquet Speaker, Monterey, California, September 5, 2002.

57. "Software Engineering as Technology Transition," Daniel E. Cooke, Keynote, Applied Information Sciences Research Program Workshop, Moffett Field, California, October 1, 2002.

58. "Exploration and Its Impact on Control Systems," Daniel E. Cooke, NASA Code U AHST Program Workshop Banquet Speaker, Monterey, California, August 17, 2003.

59. "Exploration: Can we get where we want to go? Discovering the best possible paths?," Daniel E. Cooke, Keynote, *NASA Software Engineering Technology Workshop,* Lunar and Planetary Institute, Houston, Texas, April 20-22, 2005.

60. "Exploration, Intelligent Systems, and Me," Daniel E. Cooke, *NASA Intelligent Systems Workshop,* Sunnyvale, California, April 5-7, 2005.

61. "SequenceL and Shuttle Abort Requirements," Daniel E. Cooke, *NASA Ames Code I Seminar,* Moffett Field, California, November, 2005.

62. "Software Technologies to Support Space Exploration: An Outline of Current Practices and Requirements for Lunar and Mars Exploration," Daniel Cooke, Plenary Talk at NASA ExSoft Workshop, Houston, Texas, April, 2007.

JOURNAL PUBLICATIONS and BOOK CHAPTERS

1. Daniel E. Cooke, "Formal Specifications of Resource-Deadlock Prone Petri Nets," *The Journal of Systems and Software*, Vol. 11 No. 1 (January, 1990) pp. 53-69.

2. Daniel E. Cooke, "Towards a Formalism To Produce a Programmer Assistant CASE Tool," *IEEE Transactions on Knowledge and Data Engineering*, Vol. 2 No. 3, September, 1990, pp. 320-326.

3. Daniel E. Cooke and A. Gates, "On the Development of a Method to Synthesize Programs from Requirement Specifications," *International Journal on Software Engineering and Knowledge Engineering*, Vol. 1 No. 1, (March, 1991) pp. 21-38.

4. Daniel E. Cooke, "The Impact of CASE on Software Development Processes: Guest Editor's Introduction," *International Journal on Software Engineering and Knowledge Engineering*, Vol. 1 No. 2, (June, 1991) pp. iii-iv.

5. Daniel E. Cooke, "An Issue of the Next Generation of Problem Solving Environments," *Journal of Systems Integration*, Vol. 1(2), (February, 1992) pp. 39-52.

6. Daniel E. Cooke, "The Impact of CASE on Software Development Processes II: Guest Editor's Introduction," *International Journal on Software Engineering and Knowledge Engineering*, Vol. 2 No. 2, (June, 1992) pp. 169-170.

7. C.V. Ramamoorthy, Daniel E. Cooke, and Chitta Baral, "Maintaining the Truth of Specifications in Evolutionary Software," *International Journal of AIT,* Vol. 2, No. 1 (1993) pp. 15-31.

8. Daniel E. Cooke, "Possible Effects of the Next Generation Programming Language on the Software Process Model," *International Journal on Software Engineering and Knowledge Engineering*, Vol. 3 No. 3, (September, 1993) pp. 383-399.

9. Daniel E. Cooke, "An Introduction to the Issues of Computer Aided Software Engineering," in *The Impact of CASE Technology on Software Processes,* World Scientific Publishing, Singapore (1994) pp 1-12.

10. Daniel E. Cooke, Richard Duran, Ann Gates, and Vladik Kreinovich, "Geombinatoric Problems of Environmentally Safe Manufacturing and Linear Logic," Vol. 4 No. 2 (October, 1994) , *Geombinatorics,* pp. 36-47.

11. Daniel E. Cooke, "An Informal Introduction to a High Level Language with Application to Interval Mathematics," *Reliable Computing*, Vol. 1 No. 1 (1995), pp. 65-75.

12. Luqi and Daniel E. Cooke, "How to Combine Nonmonotonic Logic and Rapid Prototyping to Help Maintain Software," *International Journal on Software Engineering and Knowledge Engineering*, Vol. 5 No. 1, (March, 1995) pp. 89-118.

13. Daniel E. Cooke, Elif Demirors, Onur Demirors, Ann Gates, Bernd Kraemer, Murat M. Tanik, "Languages for the Specification of Software," *Journal of Systems and Software,* 1996; 32:269-308.

14. Daniel E. Cooke, "An Introduction to SEQUENCEL: A Language to Experiment with Nonscalar Constructs," *Software Practice and Experience,* Vol. 26(11), (November, 1996) 1205-1246.

15. Scott A. Starks, Daniel E. Cooke, and G.R. Keller, "Establishment of the Pan American Center for Earth and Environmental Studies," *Geocarto International* Vol. 12 No. 3 (September, 1997) pp. 101-104.

16. Daniel E. Cooke and Luqi, "Logic Programming and Software Maintenance," *Annals of Mathematics and Artificial Intelligence,* 21 (1997) 221-229.

17. Daniel E. Cooke "The Outlook for Computer Languages." invited article for *COMPUTER,* (Vol. 31 No. 2) February, 1998, pp. 76-77.

18. Daniel E. Cooke and David Dampier, "A Realtime Version of SequenceL," *Annals of Software Engineering,* Volume 7 (1999), pp. 157-176.

19. Daniel E. Cooke, "SequenceL Provides a Different Way to View Programming," *ComputerLanguages* 24 (1998) 1-32.

20. Daniel E. Cooke "Specification Languages for Distributed Processing" invited article for *Encyclopedia of Distributed Processing.*

21. Daniel E. Cooke, Joseph Urban, and Scott Hamilton "UNIX and Beyond: An Interview with Ken Thompson,"*COMPUTER* (May, 1999) Vol. 32 No. 5, pp. 58-64.

22. Daniel E. Cooke, Michael Gelfond, and Joseph Urban, "Computer Language Advances," *Handbook of Software Engineering and Knowledge Engineering Vol. I,* (World Scientific Publishing, London, 2001) pp. 1-21.

23. Daniel E. Cooke and Vladik Kreinovich, "Automatic Concurrency in SequenceL," in *Electronic Notes in Theoretical Computer Science,* 25 (1999), http://www.elsevier.nl/locate/entcs/volume25.html, 12 pages.

24. Daniel E. Cooke and Vladik Kreinovich, "Automatic concurrency in SequenceL," *Science of Computer Programming*, 42 (1) (2002) pp. 115-128.

25. Daniel E. Cooke and Scott Hamilton, "New Directions for NASA Ames Research Center," *COMPUTER* (January 2000) Vol. 33 No. 1, pp.63-71.

26. Robert J. Hansen, Daniel Cooke, Kenneth Ford, Steven Zornetzer, "The NASA Intelligent Systems Initiative," *Army Acquisition, Logistics, and Technology Journal,* PB-70-00-5, (September-October 2000) pp. 21-23.

27. Daniel E. Cooke and Per Andersen, "Automatic Parallel Control Structures in SequenceL," *Software Practice and Experience*, Volume 30, Issue 14, (November 2000), 1541-1570.

28. Robert J. Hansen, Daniel Cooke, Kenneth Ford, Steven Zornetzer, "Information Technology For NASA in the 21ST Century," *Handbook of Multisensor Data Fusion*, David Hall and James Llinas, Editors, The Electrical Engineering and Applied Signal Processing Series, CRC Press, London, 2001, pp 24-1 through 24-6.

29. Daniel E. Cooke and Butler Hine III, "Virtual Collaborations with the Real: NASA's New Era in Space Exploration," *IEEE Intelligent Systems*, Vol. 17 No. 2, (March-April 2002) pp. 63-69.

30. Daniel E. Cooke, Vladik Kreinovich, and Joseph Urban, "Designing Interdisciplinary Approaches to Problem Solving Into Computer Languages," *Transactions of the Society of Design and Process Science,* September 2002, Vol. 6 No. 3, pp. 29-43.

31. Daniel E. Cooke, Matt Barry, Michael Lowry and Cordell Green "NASA's Exploration Agenda and Capability Engineering," *COMPUTER* (January 2006) Vol. 39 No. 1, pp. 63-73.

32. Cooke, D. E., Rushton, J. N., Nemanich, B., Watson, R. G., and Andersen, P. 2008. Normalize, transpose, and distribute: An automatic approach for handling nonscalars. ACM Trans. Program. Lang. Syst. 30, 2, Article 9 (February 2008), 50 pages. DOI 10.1145/1330017.1330020 http://doi.acm.org/10.1145/1330017.1330020

33. Cooke, D. E., and Rushton, J. N., Nemanich, "Taking Parnas's Principles to the Next Level: the Design of Delarative Languages," to appear in COMPUTER.

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1. Daniel E. Cooke, "Petri Nets: A Tool for Representing Concurrent Activities in Space Station Applications," *Space Station Automation III*, Wun Chiou, Sr., Editor, Proc. SPIE 851, pp. 53-63 (1987).

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Logic: The Basis for Understanding Prolog, by Daniel Cooke, ABLEX. Never published but
    sometimes cited.

<u>PROFESSIONAL SERVICE</u>
Expert Advisory Positions for Federal Agencies
Chair, NASA Software Engineering Initiative Workshop, April, 2004.
Chair, Scientific Advisory Council for the USRA Research Institute for Advanced Computer
      Science.
Member of Earth Science Enterprise Advisory Subcommittee on Technology.
Chair, NASA-CMU High Dependability Computing Consortium Review Panel.
Member of Mars Study Group 2001-2002.
Head of Subgroup of mars Study Group – Humans Exploration from the Sun-Mars Libration
      Point 2001-2002.
Society for Design and Process Science Founding Board Member
      Society for Design and Process Science Subcommittee to establish Journal
      Advisory Board for UT Austin Institute for Design Studies
Panelist for Applied Information Systems Research Program at NASA Headquarters, October,
      1996
Chairman of the IEEE Technical Committee on Computer Languages.
Chairman of Subcommittee on Research and Development for the Software Engineering
      Consortium.
Member of IEEE Computer Society Editor-in-Chief Search Committee – *Annals of the History of*
      Computing.

Journal Editorial Positions
Area Editor, Formal Methods, *International Journal of Software Engineering and Knowledge*
     Engineering.
Area Editor, Software Engineering, *IEEE Computer.*
Editor, *International Journal of Semantic Computing.*

Executive Positions for Conferences and Workshops
Vice Program Chair *IEEE TAI '92.*
Symposium Chair *ASME Computer Applications and Design Abstraction '93.*
Symposium Chair *ASME Computer Applications and Design Abstraction '94.*
Chair *ASME Computer Applications and Design Abstraction '95.*
Chair *ASME Computer s in Engineering '96.*
Chair of Workshop on Software Automation for Systems Integration Conference, 1992.
Chair of Workshop on Software Automation for International Conference on Software
      Engineering and Knowledge Engineering, 1993.
Chair of Workshop on Software Automation for International Conference on Software
      Engineering and Knowledge Engineering, 1994.
Demonstration Chair, SEKE '95.
Program Chair, International Conference on Software Engineering and Knowledge Engineering
      1996.
Chair of SDPS Systems and Software Engineering Symposium, 1996.
General Chair, IEEE Tools with Artificial Intelligence, 1997.
Steering Committee of SDPS Systems and Software Engineering Symposium, 1998.
Steering Committee of Monterey Formal Methods Workshop, 1998.
Chair of SDPS Process and Software Specifications Symposium, 2000.
Program Chair, International Conference on Software Engineering and Knowledge Engineering
      2000.
Program Chair, International Conference on Software Engineering and Knowledge Engineering
      2007.

General Chair, International Conference on Software Engineering and Knowledge Engineering 2008.

Other Boards, Panels, and Committees
Founding Board Member of the Society of Design and Process Science
Texas Technology Workforce Development Advisory Committee to the Texas Higher Education Coordinating Board 2001.
NSF ITR Panel Reviewer, National Science Foundation, May, 2001.
NSF Computer Language Panel Reviewer, National Science Foundation, January, 1999.
NASA Ames Research Center Review of the Numerical Aerospace Simulations Division, NASA, 1999.
Applied Information Science Research Program, Chair of the Data Mining Panel, NASA, 1998.
Advanced Database Project Technical Reviewer, NASA, April, 1997.
NASA Ames Research Center Review of the Information Technology Program, NASA, December, 1997.
Applied Information Science Research Program Panel Reviewer, NASA, October, 1996.
Advisory Board for UT Austin Institute for Design Studies (1997-1999)
Chairman of the IEEE Technical Committee on Computer Languages (1997-2002).

TEACHING:

Classes Taught:
Pascal, Fortran, COBOL, JAVA, Assembler Language, Systems Analysis, Data Structures, Survey of Programming Languages, Logic Programming, Database Theory, Theory of Computation, Design and Implementation of Languages, Theory of Computing Languages, Compiler Theory, Software Engineering, Specification Languages, and Testing and Maintenance.

Curriculum Development: Redesigned Master's Degree Program at UTEP.

Master's Thesis Supervision:
UTEP:
Simon Khoo, "Temporal Operators Applied to Petri Nets, Graphs, and NDA," 1989.
Ann Gates, "Recognition of Iterative Structures in a Specification Language," 1990.
Edgar Gandara, "A Simulator for a Multiprocessor Computer Architecture," 1990.
John F. Kennedy, Towards a Framework for the Design and Evaluation of Fourth Generation Languages," 1991.
Miguel Pedroza, "The Semantics of a Specification Language," 1992.
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Bo Friesen, "The Universality of BagL: Every Algorithm can be Specified in BagL," 1995.
Leticia Chee, "Computing the Value of a Boolean Expression with Interval Inputs is NP-Hard," 1996.
Richard Duran, "An Implementation of Declarative Constructs for Nonscalar Processing," 1996.

TTU:
Joe Pizzi, "Investigation into the Compilation of Regular Operators in SequenceL," 2001.
Sriram Sundararajan, "A SequenceL Interpreter Using Tuplespaces," 2003.

Master's Students in Progress:
Eric Garcia
Eric Rees

PhD Dissertations Chaired:
Ann Quiroz Gates, "Context Monitoring with Integrity Constraints," New Mexico State
    University, Graduation: December, 1994.
Per Andersen, "A Parallel Compiler for SequenceL," Texas Tech University, Graduation:
    August, 2002.
Changming Ma, "Issues of Language Translation Arising from the Normalize, Transpose,
    and Distribute Semantics of SequenceL," Texas Tech University, Graduation:
    December, 2005.
Curtis Welborn, "Specifying A Domain Specific Language For Cooperative Robotics,"
    Texas Tech University, Graduation: December, 2005.
Michael Helm, "A Methodology to Improve the Cooperative Performance of Hedonistic
    Multi-Agents," Texas Tech University, Graduation: December, 2006.

PhD Students in Progress:
Brad Nemanich
Todd Quasny

PhD Dissertations Committee Member:
«GreetingLine», "Answer Set Based Design of Highly Autonomous, Rational Agents,"
    2005.
Robert Watson, "Methods for Efficient Translation of Programs from SequenceL to
    C++," 2006.
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GENERAL INFORMATION:
Citizenship: U.S.

Appendix B
Materials Consulted
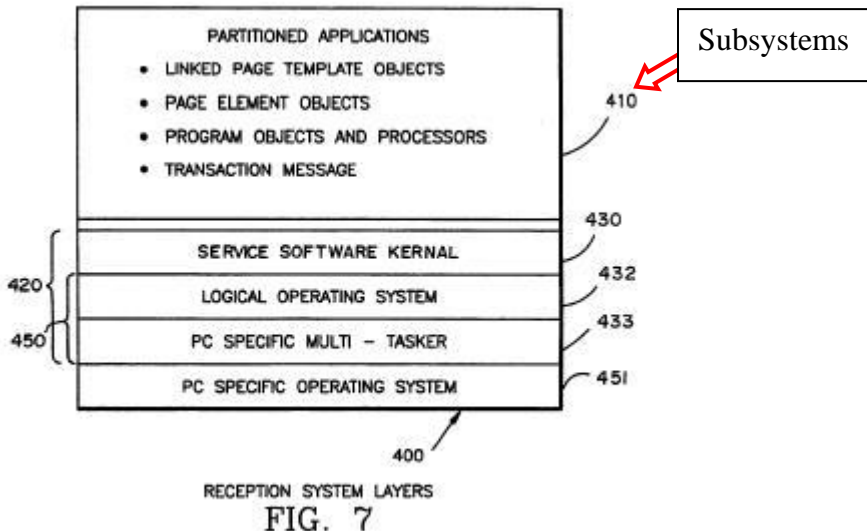
- Plaintiff's Second Amended Complaint and Demand for Jury Trial

- Defendants Infor Global Solutions, Inc.'s and SSA Global Technologies, Inc.'s Answer, Affirmative Defenses and Counterclaims to Plaintiff's Second Amended Complaint

- Preliminary Markman Order Concerning the Claim Construction of U.S. Patent No. 6,067,525 ("Order")

- Memorandum Markman Opinion Construing U.S. Patent No. 6,067,525 ("Memorandum Opinion")

- U.S. Patent No. 6,067,525 (the Johnson Patent)

- Plaintiff's Technical Tutorial

- U.S. Patent No. 6,067,525 Prosecution History

- Prior Art listed in chart below

- Infor Global Solutions (Michigan), Inc.'s Third Amended Invalidity Contentions

- Protective Order

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3. U.S. Patent 4,992,940 to Dworkin	20. U.S. Patent 4,149,246 to Goldman
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Appendix C
Claim Charts

Filepp et al U.S. Pat. No. 5,347,632 anticipates asserted Claims 1-3, 5, 7, 20, 24, 34, and 40

U.S. Pat. No 6,067,525 claim 1	U.S. Pat. No 6,067,525 claim 1 with Court's claim construction	Filepp et al U.S. Pat. No. 5,347,632
A <u>computer</u> implemented sales system used to facilitate a <u>sales process</u>, the system comprising:	A computer implemented sales system used to facilitate a sales process, the system comprising:	The preamble is not a limitation, nonetheless abstract: "An interactive <u>computer</u> system that enables a user to… perform desired transactions such as banking and shopping…" Col. 6 Lines 56-61: "Services available to the user include…the purchase of items such as retail merchandise and groceries… and <u>buy/sell</u> orders for stocks and bonds."
<u>a plurality of subsystems</u> configured to facilitate one or more actions performed during at least one phase of the sales process; and	a plurality of **[systems that are part of a larger system]** configured to facilitate one or more actions performed during at least one phase of the sales process; and	Col. 3 lines 27-34:

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U.S. Pat. No 6,067,525 claim 1	U.S. Pat. No 6,067,525 claim 1 with Court's claim construction	Filepp et al U.S. Pat. No. 5,347,632
		"In preferred form the reception system further comprises…a plurality of partitioned applications; and object processing means…for selecting and retrieving objects…and interpreting and executing the partitioned applications"
		Col. 5 lines 26-27:
		"Each application partition is an independent, self-contained unit and can operate correctly by itself."
		Col. 6 lines 45-68:
a plurality of subsystems configured to facilitate one or more actions performed during at least one phase of the sales process; and	a plurality of [systems that are part of a larger system] configured to facilitate one or more actions performed during at least one phase of the sales process; and	"Services available to the user include display of information such as movie reviews, the latest news, airlines reservations, the purchase of items such as retail merchandise and groceries, and quotes and buy/sell orders for stocks and bonds. Network 10 provides an environment in which a user, via RS 400 establishes a session with the network and accesses a large number of services. These services are specifically constructed applications which as noted are partitioned so they may be distributed without undo transmission time, and may be processed and selectively stored on a user's RS 400 unit."
		Col. 9, lines 30-34:
a plurality of subsystems configured to facilitate one or more actions performed during at least one phase of the sales process; and	a plurality of [systems that are part of a larger system] configured to facilitate one or more actions performed during at least one phase of the sales process; and	"Advertisements 280 may be presented to the user on an individual basis from queues of advertisements that are constructed off-line by business system 130, and sent to file server 205 where they are accessible to each RS 400."

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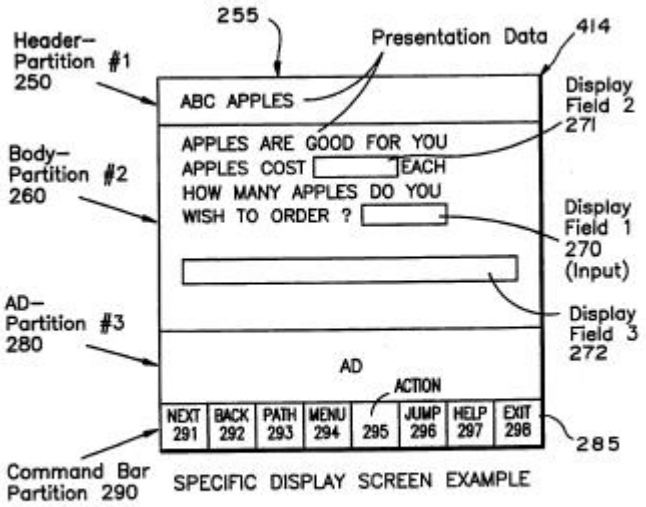| U.S. Pat. No 6,067,525 claim 1	U.S. Pat. No 6,067,525 claim 1 with Court's claim construction	Filepp et al U.S. Pat. No. 5,347,632

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U.S. Pat. No 6,067,525 claim 1	U.S. Pat. No 6,067,525 claim 1 with Court's claim construction	Filepp et al U.S. Pat. No. 5,347,632
an <u>event manager, coupled to the subsystems</u>, the event manager detecting one or more changes in state characteristic of an event occurring within the system	**[hardware and/or software]**, coupled to the **[systems that are part of a larger system]**, the **[hardware and/or software]** detecting one or more **[changes in a unique configuration of information within the system that is indicative of the occurrence of an event within the system]** occurring within the system,	 Col. 82 lines 30-59: "Again with reference to FIG. 7, native software 420 ... is composed of two components: the service software 430 and the operating environment 450. … Service software 430 provides functions specific to providing interaction between the user and interactive network 10 ... Service software 430 is comprised of modules, which are device-independent software components that together obtain, interpret and store partitioned applications existing as a collection of objects. The functions performed by, and the relationship between, the service software 430 module is shown in FIG. 8 and discussed further below."

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U.S. Pat. No 6,067,525 claim 1	U.S. Pat. No 6,067,525 claim 1 with Court's claim construction	Filepp et al U.S. Pat. No. 5,347,632
		Col. 83 lines 12-21: "RS native software provides a virtual machine interface for partitioned applications, such that all objects comprising partitioned applications "see" the same machine. RS native software provides support for the following functions: (1) keyboard and mouse input; (2) text and graphics display; (3) application interpretation; (4) application database management; (5) local application storage; (6) network and link level communications; (7) user activity data collection; and (8) advertisement management." Col. 8 lines 9-14: "The RS 400 is the point of application session control because it has the ability to <u>select</u> and randomly access objects representing all or part of partitioned applications and their data. RS 400 processes objects according to information contained therein and events created by the user on personal computer 405." Col. 3 lines 27-34: "In preferred form the reception system further comprises… objects comprising a <u>plurality of partitioned applications</u>; and object processing means…for selecting and retrieving objects…and interpreting and executing the partitioned applications" Col. 6 lines 3-9: "The RS 400 supports a protocol by which the user and the <u>partitioned applications communicate</u>. All partitioned applications are designed

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U.S. Pat. No 6,067,525 claim 1	U.S. Pat. No 6,067,525 claim 1 with Court's claim construction	Filepp et al U.S. Pat. No. 5,347,632
an event manager, <u>coupled</u> to the subsystems, the event manager detecting one or more changes in state characteristic of an event occurring within the system an event manager, coupled to the subsystems, the event manager <u>detecting one or more changes in state characteristic</u> of an event occurring within the system		knowing that this protocol will be supported in RS 400. Hence, replication of the protocol in each partitioned application is avoided, thereby minimizing the size of the partitioned application." Col. 101 lines 53-54: "<u>receiving requests</u> for partitioned applications at the reception system." FIG. 6

U.S. Pat. No 6,067,525 claim 1	U.S. Pat. No 6,067,525 claim 1 with Court's claim construction	Filepp et al U.S. Pat. No. 5,347,632
inferring occurrence of the event and a context in which the event occurred based at least in part on the detected changes in state, and	[logical process by which the fact that the event has occurred is derived by application of logical rules] and [logical process by which the fact that information already existing within the system that becomes relevant upon the occurrence of the event is derived by application of logical rules] based at least in part on the detected changes in state, and	 Col. 14 lines 52-55: "Program events will be specified in logical terms and will be mapped by the reception system to specific physical triggers…" Col. 81 lines 43-51: "Certain inputs, such as RETURN or mouse clicks in particular fields, are mapped to logical events by keyboard manager 434, which are called completion (or commit) events. Completion events signify the

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U.S. Pat. No 6,067,525 claim 1	U.S. Pat. No 6,067,525 claim 1 with Court's claim construction	Filepp et al U.S. Pat. No. 5,347,632
inferring occurrence of the event and a context in which the event occurred based at least in part on the detected changes in state, and	[logical process by which the fact that the event has occurred is derived by application of logical rules] and [logical process by which the fact that information already existing within the system that becomes relevant upon the occurrence of the event is derived by application of logical rules] based at least in part on the detected changes in state, and	completion of some selection or specification process associated with the partitioned application and trigger a partition level and/or page level post-processor to process the 'action' parameters associated with the user's selection and commit event." Col. 39 lines 60-66: "Reception system is aware of the occurrence of physical events during the…interactive sessions. When a physical event such as the depression of a …key corresponds to a logical event such as the completion of data entry in a field…" Col. 73 lines 52-64: "Through this interaction, the user is able to input data into fields provided as part of the display, or may individually select choices causing a standard or personalized page to be built (as explained below) for display on the monitor of personal computer 405. Such inputs will cause RS 400 [reception system] to interpret events and trigger pre-processors or post-processors, retrieve specified objects, communicate with system components, control user options, cause the display of advertisements on a page, open or close window partitions to provide additional navigation possibilities, and collect and report data about events, including certain types of objects processed." Col. 5, line 55 – Col. 6 line 9: "Objects carry application programs and information for display at monitor screen 414 of RS 400. Application program objects, called pre-processor and post-processors, set up the environment for the user's interaction with network 10 and respond to events created when the user inputs information at keyboard 424 of RS 400. Such events

U.S. Pat. No 6,067,525 claim 1	U.S. Pat. No 6,067,525 claim 1 with Court's claim construction	Filepp et al U.S. Pat. No. 5,347,632
		typically trigger a program object to be processed, causing one of the following: sending of transactional information to the coapplications in one layer of the network 10; the receiving of information for use in programs or for presentation in application-dependent fields on monitor screen 414; or the requesting of a new objects to be processed by RS 400. Such objects may be part of the same application or a completely new application. The RS 400 supports a protocol by which the user and the partitioned applications communicate. All partitioned applications are designed knowing that this protocol will be supported in RS 400. Hence, replication of the protocol in each partitioned application is avoided, thereby minimizing the size of the partitioned application." Col. 6 lines 10-12: RS 400 includes a means to communicate with network 10 to retrieve objects in response to events occurring at RS 400 and to send and receive messages. Col. 7 lines 35-46: Objects may contain: control information; program instruction to set up an application processing environment and to process user or network created events; information about what is to be displayed and how it is to be displayed; references to programs to be interpretively executed; and references to other objects, which may be called based upon certain conditions or the occurrence of certain events at the user's personal computer, resulting in the selection and retrieval of other partitioned applications packaged as objects.

U.S. Pat. No 6,067,525 claim 1	U.S. Pat. No 6,067,525 claim 1 with Court's claim construction	Filepp et al U.S. Pat. No. 5,347,632
inferring occurrence of the event and a context in which the event occurred based at least in part on the detected changes in state, and		Col. 8 lines 2-8: If such objects are requested by the RS 400, the cache/concentrator 302 automatically requests the object from file server 205. The requested object is routed back to the requesting cache/concentrator 302, which automatically routes it to the communications line on which the request was originally made, from which it is received by the RS 400. Col. 9, lines 35-47: Individual queues of advertisements are constructed based upon data collected on the partitioned applications that were accessed by a user, and upon events the user generated in response to applications. The data are collected and reported by RS 400 to a data collection co-application in file server 205 for later transmission to business system 130. In addition to application access and use characteristics, a variety of other parameters, such as user demographics or postal ZIP code, may be used as targeting criteria. From such data, queues of advertisements are constructed and targeted to either individual users or to sets of users who fall into certain groups according such parameters. Col. 81 lines 15-22: "This feature enables RS 400 to conditionally deliver information to the user base upon predetermined parameters, such as his personal demographics or locale. For example, the parameters specified may be the transaction codes required to retrieve the user's age, sex, and personal interest codes from records contained in user profiles stored at the switch/file server layer 200."

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U.S. Pat. No 6,067,525 claim 1	U.S. Pat. No 6,067,525 claim 1 with Court's claim construction	Filepp et al U.S. Pat. No. 5,347,632
automatically initiating an operation in one or more particular subsystems of the computer to facilitate a new action based on the inferred context.	automatically initiating an operation in one or more particular **[systems that are part of a larger system]** of the computer to facilitate a new action based on the inferred context.	 Col. 74 lines 59-62: "If the functions are part of [reception system] they can be altered or extended… [to] permit the execution of program objects to be triggered…"

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U.S. Pat. No 6,067,525 claim 1	U.S. Pat. No 6,067,525 claim 1 with Court's claim construction	Filepp et al U.S. Pat. No. 5,347,632
automatically initiating an operation in one or more particular subsystems of the computer to facilitate a new action based on the inferred context.		Col. 8 lines 24-27: "selecting another partitioned application to be processed upon a user generated completion event for the current partitioned application." Col. 99 lines 12-16: The reception system comprising: "object processing means responsive to the input means for selectively retrieving and interpreting objects to extract data and program instructions for composing and generating the partitioned applications…" FIG. 3b
automatically initiating an operation in one or more		

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U.S. Pat. No 6,067,525 claim 1	U.S. Pat. No 6,067,525 claim 1 with Court's claim construction	Filepp et al U.S. Pat. No. 5,347,632
particular subsystems of the computer to facilitate <u>a new action</u> based on the inferred context.		Col. 95 line 67- Col. 96 line 3: "The page illustrated in FIG. 3(b) corresponds to <u>a partitioned application that permit's</u> [sic] a personal computer user to <u>purchase apples</u>. It shows how the monitor screen 414 of personal computer 405 might appear to the user."
automatically initiating an <u>operation in one or more particular subsystems</u> of the computer to facilitate a new action <u>based on the inferred context</u>.		Col. 9, lines 35-47: Individual queues of advertisements are constructed based upon data collected on the partitioned applications that were accessed by a user, and upon events the user generated in response to applications. The data are collected and reported by RS 400 to a data collection co-application in file server 205 for later transmission to business system 130. In addition to application access and use characteristics, a variety of other parameters, such as user demographics or postal ZIP code, may be used as targeting criteria. <u>From such data</u>, <u>queues of advertisements are constructed</u> and targeted to either individual users or to sets of users who fall into certain groups according such parameters.

U.S. Pat. No 6,067,525 claim 2	U.S. Pat. No 6,067,525 claim 2 with Court's claim construction	Filepp et al U.S. Pat. No. 5,347,632
A system as recited in claim 1,	A system as recited in claim 1,	[Claim 1 chart incorporated by reference]
wherein the inferred context includes information related to at least one phase of the sales process.	wherein the inferred **[information already existing within the system that becomes relevant upon the occurrence of an event]** includes information related to at least one phase of the sales process.	Col. 73 lines 52-64: "Through this interaction, the user is able to input data into fields provided as part of the display, or may individually select choices causing a standard or personalized page to be built (as explained below) for display on the monitor of personal computer 405. Such inputs will cause RS 400 [reception system] to interpret events and trigger pre-processors or post-processors, retrieve specified objects, communicate with system components, control user options, cause the display of advertisements on a page, open or close window partitions to provide additional navigation possibilities, and collect and report data about events, including certain types of objects processed." Col. 5, line 55 – Col. 6 line 9: "Objects carry application programs and information for display at monitor screen 414 of RS 400. Application program objects, called pre-processor and post-processors, set up the environment for the user's interaction with network 10 and respond to events created when the user inputs information at keyboard 424 of RS 400. Such events typically trigger a program object to be processed, causing one of the following: sending of transactional information to the coapplications in one layer of the network 10; the receiving of information for use in programs or for presentation in application-dependent fields on monitor screen 414; or the requesting of a new objects to be processed by RS 400. Such objects may be part of the same application or a completely

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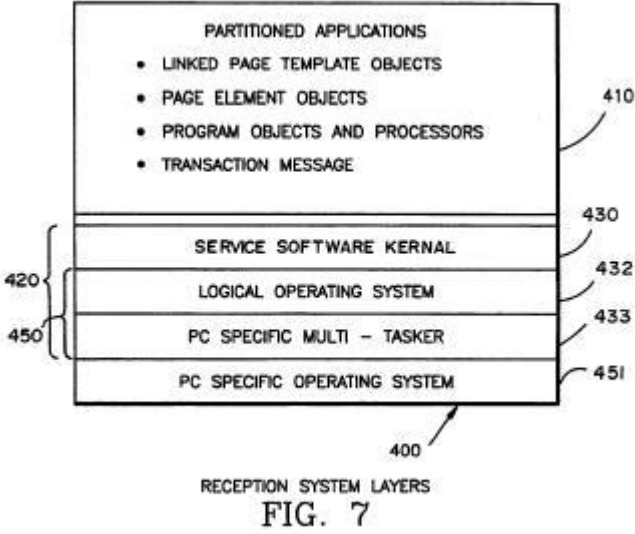| U.S. Pat. No 6,067,525 claim 2	U.S. Pat. No 6,067,525 claim 2 with Court's claim construction	Filepp et al U.S. Pat. No. 5,347,632
		new application. The RS 400 supports a protocol by which the user and the partitioned applications communicate. All partitioned applications are designed knowing that this protocol will be supported in RS 400. Hence, replication of the protocol in each partitioned application is avoided, thereby minimizing the size of the partitioned application. Col. 9, lines 35-47: Individual queues of advertisements are constructed based <u>upon data collected on the partitioned applications</u> that were accessed by a user, and upon events the user generated in response to applications. The data are collected and reported by RS 400 to a data collection co-application in file server 205 for later transmission to business system 130. In addition to application access and use characteristics, <u>a variety of other parameters, such as user demographics or postal ZIP code, may be used as targeting criteria</u>. From such data, queues of advertisements are constructed and targeted to either individual users or to sets of users who fall into certain groups according such parameters. Col. 81 lines 15-22: "This feature enables RS 400 to conditionally deliver information to the user base upon <u>predetermined parameters, such as his personal demographics or locale</u>. For example, the parameters specified may be the transaction codes required to retrieve the user's age, sex, and personal interest codes from records contained in user profiles stored at the switch/file server layer 200."

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U.S. Pat. No 6,067,525 claim 3	U.S. Pat. No 6,067,525 claim 3 with Court's claim construction	Filepp et al U.S. Pat. No. 5,347,632
A system as recited in claim 1,	A system as recited in claim 1,	[Claim 1 chart incorporated by reference]
wherein the inferred context includes information related to whether a <u>previous event</u> has occurred in the sales process.	wherein the inferred **[information already existing within the system that becomes relevant upon the occurrence of an event]** includes information related to whether a previous event has occurred in the sales process.	Col. 73 lines 52-64: "Through this interaction, the user is able to input data into fields provided as part of the display, or may individually select choices causing a standard or personalized page to be built (as explained below) for display on the monitor of personal computer 405. Such inputs will cause RS 400 [reception system] to interpret events and trigger pre-processors or post-processors, <u>retrieve specified objects</u>, communicate with system components, control user options, cause the <u>display of advertisements on a page</u>, open or close window partitions to provide additional navigation possibilities, and collect and report data about events, including certain types of objects processed." Col. 5, line 55 – Col. 6 line 9: "Objects carry application programs and <u>information for display</u> at monitor screen 414 of RS 400. Application program objects, called pre-processor and post-processors, set up the environment for the user's interaction with network 10 and respond to events created when the user inputs information at keyboard 424 of RS 400. Such events typically trigger a program object to be processed, causing one of the following: sending of transactional information to the coapplications in one layer of the network 10; <u>the receiving of information for use in programs or for presentation in application-dependent fields</u> on monitor screen 414; or the requesting of a new objects to be processed by RS 400. Such objects may be part of the same application or a completely new application. The

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U.S. Pat. No 6,067,525 claim 3	U.S. Pat. No 6,067,525 claim 3 with Court's claim construction	Filepp et al U.S. Pat. No. 5,347,632
		RS 400 supports a protocol by which the user and the partitioned applications communicate. All partitioned applications are designed knowing that this protocol will be supported in RS 400. Hence, replication of the protocol in each partitioned application is avoided, thereby minimizing the size of the partitioned application. Col. 9, lines 35-47: Individual queues of advertisements are constructed based <u>upon data collected on the partitioned applications</u> that were accessed by a user, and upon events the user generated in response to applications. The data are collected and reported by RS 400 to a data collection co-application in file server 205 for later transmission to business system 130. In addition to application access and use characteristics, <u>a variety of other parameters, such as user demographics or postal ZIP code, may be used as targeting criteria.</u> From such data, queues of advertisements are constructed and targeted to either individual users or to sets of users who fall into certain groups according such parameters. Col. 81 lines 15-22: "This feature enables RS 400 to conditionally deliver information to the user base upon <u>predetermined parameters, such as his personal demographics or locale.</u> For example, the parameters specified may be the transaction codes required to retrieve the user's age, sex, and personal interest codes from records contained in user profiles stored at the switch/file server layer 200."

U.S. Pat. No 6,067,525 claim 5	U.S. Pat. No 6,067,525 claim 5 with Court's claim construction	Filepp et al U.S. Pat. No. 5,347,632
A system as recited in claim 1, wherein the plurality of subsystems comprises:	A system as recited in claim 1, wherein the plurality of **[systems that are parts of a larger system]** comprises:	[Claim 1 chart incorporated by reference]
a time with customer subsystem configured to convert a lead to a buying customer, so as to close a sale; and	a time with customer **[system that is part of a larger system]** configured to convert a lead to a buying customer, so as to close a sale; and	Col. 6 lines 45-68: "Services available to the user include display of information such as movie reviews, the latest news, airlines reservations, the purchase of items such as retail merchandise and groceries, and quotes and <u>buy/sell orders</u> for stocks and bonds. Network 10 provides an environment in which a user, via RS 400 establishes a session with the network and accesses a large number of services. These <u>services are specifically constructed applications which as noted are partitioned</u> so they may be distributed without undo transmission time, and may be processed and selectively stored on a user's RS 400 unit." Col. 9, lines 30-34: "<u>Advertisements 280 may be presented</u> to the user on an individual basis from queues of advertisements that are constructed off-line by business system 130, and sent to file server 205 where they are accessible to each RS 400."
a lead generation subsystem configured to convert a name to a potential customer.	a lead generation **[system that is a part of a larger system]** configured to convert a name to a potential customer.	Col. 6 lines 45-68: "Services available to the user include display of information such as movie reviews, the latest news, airlines reservations, the purchase of items such as retail merchandise and groceries, and quotes and <u>buy/sell orders</u> for stocks and bonds. Network 10 provides an environment in

U.S. Pat. No 6,067,525 claim 5	U.S. Pat. No 6,067,525 claim 5 with Court's claim construction	Filepp et al U.S. Pat. No. 5,347,632
		which a user, via RS 400 establishes a session with the network and accesses a large number of services. These <u>services are specifically constructed applications which as noted are partitioned</u> so they may be distributed without undo transmission time, and may be processed and selectively stored on a user's RS 400 unit." Col. 9, lines 30-34: "<u>Advertisements 280 may be presented</u> to the user on an individual basis from queues of advertisements that are constructed off-line by business system 130, and sent to file server 205 where they are accessible to each RS 400."

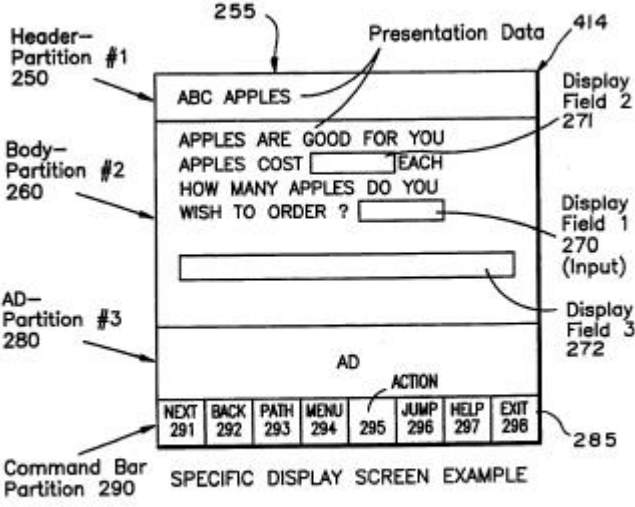| U.S. Pat. No 6,067,525 claim 7	U.S. Pat. No 6,067,525 claim 7 with Court's claim construction	Filepp et al U.S. Pat. No. 5,347,632
A system as recited in claim 1, wherein the plurality of subsystems comprises:	A system as recited in claim 1, wherein the plurality of **[systems that are parts of a larger system]** comprises:	[Claim 1 chart incorporated by reference]
a time with customer subsystem configured to convert a lead to a buying customer, so as to close a sale; and	a time with customer **[system that is part of a larger system]** configured to convert a lead to a buying customer, so as to close a sale; and	Col. 6 lines 45-68: "Services available to the user include display of information such as movie reviews, the latest news, airlines reservations, the purchase of items such as retail merchandise and groceries, and quotes and buy/sell orders for stocks and bonds. Network 10 provides an environment in which a user, via RS 400 establishes a session with the network and accesses a large number of services. These services are specifically constructed applications which as noted are partitioned so they may be distributed without undo transmission time, and may be processed and selectively stored on a user's RS 400 unit." Col. 9, lines 30-34: "Advertisements 280 may be presented to the user on an individual basis from queues of advertisements that are constructed off-line by business system 130, and sent to file server 205 where they are accessible to each RS 400."
a customer retention subsystem configured to convert an existing customer into a lead, so as to generate repeat sales.	a customer retention **[system that is part of a larger system]** configured to convert an existing customer into a lead, so as to generate	Col. 6 lines 45-68: "Services available to the user include display of information such as movie reviews, the latest news, airlines reservations, the purchase of items such as retail merchandise and groceries, and quotes and buy/sell orders for stocks and bonds. Network 10 provides an environment in

U.S. Pat. No 6,067,525 claim 7	U.S. Pat. No 6,067,525 claim 7 with Court's claim construction	Filepp et al U.S. Pat. No. 5,347,632
	repeat sales.	which a user, via RS 400 establishes a session with the network and accesses a large number of services. These <u>services are specifically constructed applications which as noted are partitioned</u> so they may be distributed without undo transmission time, and may be processed and selectively stored on a user's RS 400 unit." Col. 9, lines 30-34: "<u>Advertisements 280 may be presented</u> to the user on an individual basis from queues of advertisements that are constructed off-line by business system 130, and sent to file server 205 where they are accessible to each RS 400."

U.S. Pat. No 6,067,525 claim 20	U.S. Pat. No 6,067,525 claim 20 with Court's claim construction	Filepp et al U.S. Pat. No. 5,347,632
A method of facilitating a sales process using a computer arrangement having a plurality of subsystems configured to facilitate one or more actions performed during at least one phase of the sales process, the method comprising the steps of:	A method of facilitating a sales process using a computer arrangement having a plurality of **[systems that are part of a larger system]** configured to facilitate one or more actions performed during at least one phase of the sales process, the method comprising the steps of:	The preamble is not a limitation, nonetheless abstract: "An interactive <u>computer</u> system that enables a user to… perform desired transactions such as banking and shopping…" Col. 6 lines 56-61: "Services available to the user include…the purchase of items such as retail merchandise and groceries… and <u>buy/sell</u> orders for stocks and bonds." Col. 3 lines 27-34: "In preferred form the reception system further comprises…a <u>plurality of partitioned applications</u>; and object processing means…for selecting and retrieving objects…and interpreting and executing the partitioned applications" Col. 5 lines 26-27: "Each application partition is an independent, self-contained unit and can operate correctly by itself." Col. 6 lines 45-68: "Services available to the user include display of information such as movie reviews, the latest news, airlines reservations, the purchase of items such as retail merchandise and groceries, and quotes and buy/sell

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U.S. Pat. No 6,067,525 claim 20	U.S. Pat. No 6,067,525 claim 20 with Court's claim construction	Filepp et al U.S. Pat. No. 5,347,632
		orders for stocks and bonds. Network 10 provides an environment in which a user, via RS 400 establishes a session with the network and accesses a large number of services. These services are specifically constructed applications which as noted are partitioned so they may be distributed without undo transmission time, and may be processed and selectively stored on a user's RS 400 unit." Col. 9, lines 30-34: "Advertisements 280 may be presented to the user on an individual basis from queues of advertisements that are constructed off-line by business system 130, and sent to file server 205 where they are accessible to each RS 400." RECEPTION SYSTEM LAYERS FIG. 7

U.S. Pat. No 6,067,525 claim 20	U.S. Pat. No 6,067,525 claim 20 with Court's claim construction	Filepp et al U.S. Pat. No. 5,347,632
		 Subsystems FIG. 2
automatically detecting one or more changes in state characteristic of an event occurring in the sales process;	automatically detecting one or more **[changes in a unique configuration of information within the system that is indicative of the occurrence of an event within the system]**	Col. 101 lines 53-54: "receiving requests for partitioned applications at the reception system."

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U.S. Pat. No 6,067,525 claim 20	U.S. Pat. No 6,067,525 claim 20 with Court's claim construction	Filepp et al U.S. Pat. No. 5,347,632
	occurring in the sales process;	

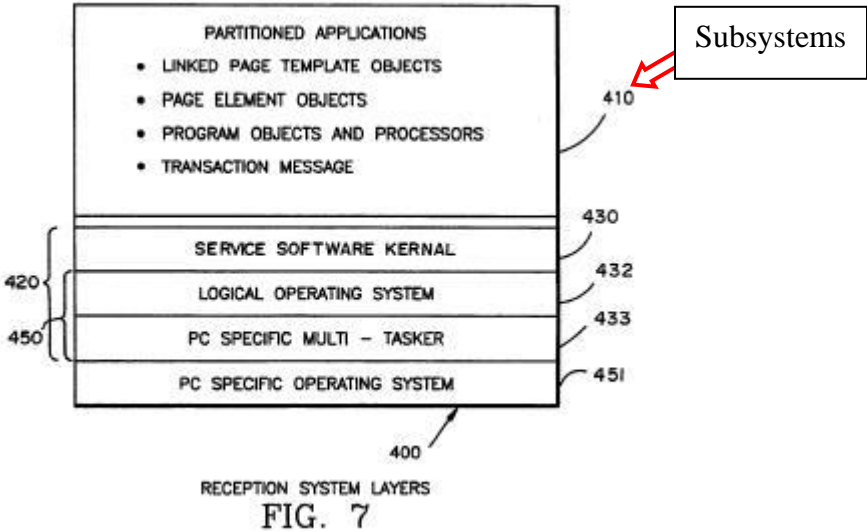| U.S. Pat. No 6,067,525 claim 20	U.S. Pat. No 6,067,525 claim 20 with Court's claim construction	Filepp et al U.S. Pat. No. 5,347,632
inferring occurrence of the event and a context in which the event occurred based at least in part on the detected changes in state; and	[logical process by which the fact that the event has occurred is derived by application of logical rules] and [logical process by which the fact that information already existing within the system that becomes relevant upon the occurrence of the event is derived by application of logical rules] based at least in part on the detected changes in state; and	Col. 14 lines 52-55: "Program events will be specified in logical terms and will be mapped by the reception system to specific physical triggers…" Col. 81 lines 43-51: "Certain inputs, such as RETURN or mouse clicks in particular fields, are mapped to logical events by keyboard manager 434, which are called

FIG. 6
R.S. PROTOCOL

Inferring

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U.S. Pat. No 6,067,525 claim 20	U.S. Pat. No 6,067,525 claim 20 with Court's claim construction	Filepp et al U.S. Pat. No. 5,347,632
		completion (or commit) events. Completion events signify the completion of some selection or specification process associated with the partitioned application and trigger a partition level and/or page level post-processor to process the 'action' parameters associated with the user's selection and commit event." Col. 39 lines 60-66: "Reception system is aware of the occurrence of physical events during the…interactive sessions. When a physical event such as the depression of a …key corresponds to a logical event such as the completion of data entry in a field…" Col. 73 lines 52-64: "Through this interaction, the user is able to input data into fields provided as part of the display, or may individually select choices causing a standard or personalized page to be built (as explained below) for display on the monitor of personal computer 405. Such inputs will cause RS 400 [reception system] to interpret events and trigger pre-processors or post-processors, retrieve specified objects, communicate with system components, control user options, cause the display of advertisements on a page, open or close window partitions to provide additional navigation possibilities, and collect and report data about events, including certain types of objects processed." Col. 9, lines 35-47: Individual queues of advertisements are constructed based upon data

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U.S. Pat. No 6,067,525 claim 20	U.S. Pat. No 6,067,525 claim 20 with Court's claim construction	Filepp et al U.S. Pat. No. 5,347,632
		collected on the partitioned applications that were accessed by a user, and upon events the user generated in response to applications. The data are collected and reported by RS 400 to a data collection co-application in file server 205 for later transmission to business system 130. In addition to application access and use characteristics, a variety of other parameters, such as user demographics or postal ZIP code, may be used as targeting criteria. From such data, queues of advertisements are constructed and targeted to either individual users or to sets of users who fall into certain groups according such parameters. Col. 81 lines 15-22: "This feature enables RS 400 to conditionally deliver information to the user base upon predetermined parameters, such as his personal demographics or locale. For example, the parameters specified may be the transaction codes required to retrieve the user's age, sex, and personal interest codes from records contained in user profiles stored at the switch/file server layer 200."

U.S. Pat. No 6,067,525 claim 20	U.S. Pat. No 6,067,525 claim 20 with Court's claim construction	Filepp et al U.S. Pat. No. 5,347,632
automatically initiating an operation in one or more particular subsystems of the computer to facilitate a new action based on the inferred context.	automatically initiating an operation in one or more particular [systems that are part of a larger system] of the computer to facilitate a new action based on the inferred context.	 Col. 74 lines 59-62: "If the functions are part of [reception system] they can be altered or extended… [to] permit the execution of program objects to be triggered…" Col. 99 lines 12-16: The reception system comprising: "object processing means responsive to the input means for selectively retrieving and interpreting objects to

U.S. Pat. No 6,067,525 claim 20	U.S. Pat. No 6,067,525 claim 20 with Court's claim construction	Filepp et al U.S. Pat. No. 5,347,632
		extract data and program instructions for <u>composing and generating the partitioned applications</u>…" FIG. 3b Col. 95 line 67- Col. 96 line 3: "The page illustrated in FIG. 3(b) corresponds to <u>a partitioned application that permit's</u> [sic] a personal computer user to <u>purchase apples</u>. It shows how the monitor screen 414 of personal computer 405 might appear to the user."

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U.S. Pat. No 6,067,525 claim 20	U.S. Pat. No 6,067,525 claim 20 with Court's claim construction	Filepp et al U.S. Pat. No. 5,347,632
		Col. 9, lines 35-47: Individual queues of advertisements are constructed based upon data collected on the partitioned applications that were accessed by a user, and upon events the user generated in response to applications. The data are collected and reported by RS 400 to a data collection co-application in file server 205 for later transmission to business system 130. In addition to application access and use characteristics, a variety of other parameters, such as user demographics or postal ZIP code, may be used as targeting criteria. <u>From such data, queues of advertisements are constructed</u> and targeted to either individual users or to sets of users who fall into certain groups according such parameters.

U.S. Pat. No 6,067, 525 claim 24	U.S. Pat. No 6,067,525 claim 24 with Court's claim construction	Filepp et al U.S. Pat. No. 5,347,632
A method as recited in claim 20,	A method as recited in claim 20,	[Claim 20 chart incorporated by reference]
wherein the inferred context includes information related to at least one phase of the sales process.	wherein the inferred **[information already existing within the system that becomes relevant upon the occurrence of an event]** includes information related to at least one phase of the sales process.	Col. 73 lines 52-64: "Through this interaction, the user is able to input data into fields provided as part of the display, or may individually select choices causing a standard or personalized page to be built (as explained below) for display on the monitor of personal computer 405. Such inputs will cause RS 400 [reception system] to interpret events and trigger pre-processors or post-processors, <u>retrieve specified objects</u>, communicate with system components, control user options, cause the <u>display of advertisements on a page</u>, open or close window partitions to provide additional navigation possibilities, and collect and report data about events, including certain types of objects processed." Col. 5, line 55 – Col. 6 line 9: "Objects carry application programs and <u>information for display</u> at monitor screen 414 of RS 400. Application program objects, called pre-processor and post-processors, set up the environment for the user's interaction with network 10 and respond to events created when the user inputs information at keyboard 424 of RS 400. Such events typically trigger a program object to be processed, causing one of the following: sending of transactional information to the coapplications in one layer of the network 10; <u>the receiving of information for use in programs or for presentation in application-dependent fields</u> on monitor screen 414; or the requesting of a new objects to be processed by RS 400. Such objects may be part of the same application or a completely

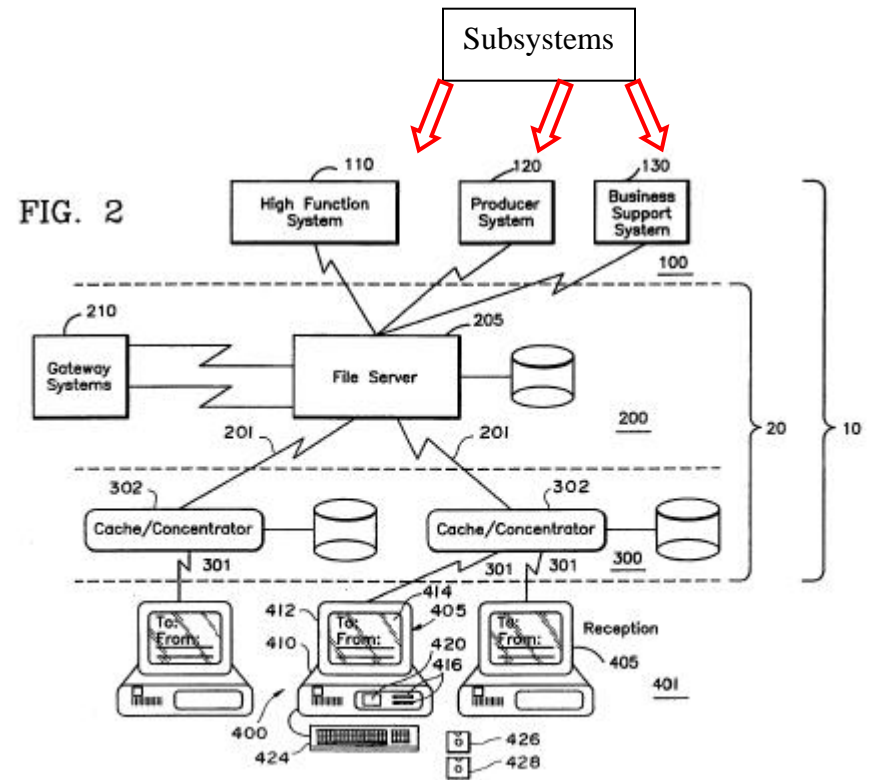| U.S. Pat. No 6,067, 525 claim 24	U.S. Pat. No 6,067,525 claim 24 with Court's claim construction	Filepp et al U.S. Pat. No. 5,347,632
		new application. The RS 400 supports a protocol by which the user and the partitioned applications communicate. All partitioned applications are designed knowing that this protocol will be supported in RS 400. Hence, replication of the protocol in each partitioned application is avoided, thereby minimizing the size of the partitioned application. Col. 9, lines 35-47: Individual queues of advertisements are constructed based upon data collected on the partitioned applications that were accessed by a user, and upon events the user generated in response to applications. The data are collected and reported by RS 400 to a data collection co-application in file server 205 for later transmission to business system 130. In addition to application access and use characteristics, a variety of other parameters, such as user demographics or postal ZIP code, may be used as targeting criteria. From such data, queues of advertisements are constructed and targeted to either individual users or to sets of users who fall into certain groups according such parameters. Col. 81 lines 15-22: "This feature enables RS 400 to conditionally deliver information to the user base upon predetermined parameters, such as his personal demographics or locale. For example, the parameters specified may be the transaction codes required to retrieve the user's age, sex, and personal interest codes from records contained in user profiles stored at the switch/file server layer 200."

U.S. Pat. No 6,067, 525 claim 34	U.S. Pat. No 6,067,525 claim 34 with Court's claim construction	Filepp et al U.S. Pat. No. 5,347,632
A method as recited in claim 20, further comprising the steps of:	A method as recited in claim 20, further comprising the steps of:	[Claim 20 chart incorporated by reference]
inferring occurrence of an event while converting a lead to a buying customer; and	**[logical process by which the fact that the event has occurred is derived by application of logical rules]** while converting a lead to a buying customer; and	Col. 6 lines 45-68: "Services available to the user include display of information such as movie reviews, the latest news, airlines reservations, the purchase of items such as retail merchandise and groceries, and quotes and buy/sell orders for stocks and bonds. Network 10 provides an environment in which a user, via RS 400 establishes a session with the network and accesses a large number of services. These services are specifically constructed applications which as noted are partitioned so they may be distributed without undo transmission time, and may be processed and selectively stored on a user's RS 400 unit." Col. 9, lines 30-34: "Advertisements 280 may be presented to the user on an individual basis from queues of advertisements that are constructed off-line by business system 130, and sent to file server 205 where they are accessible to each RS 400."
using the particular subsystem to convert an existing customer into a lead, so as to generate repeat sales.	using the particular **[system that is part of a larger system]** to convert an existing customer into a lead, so as to generate repeat sales.	Col. 6 lines 45-68: "Services available to the user include display of information such as movie reviews, the latest news, airlines reservations, the purchase of items such as retail merchandise and groceries, and quotes and buy/sell orders for stocks and bonds. Network 10 provides an environment in which a user, via RS 400 establishes a session with the network and

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U.S. Pat. No 6,067, 525 claim 34	U.S. Pat. No 6,067,525 claim 34 with Court's claim construction	Filepp et al U.S. Pat. No. 5,347,632
		accesses a large number of services. These <u>services are specifically constructed applications which as noted are partitioned</u> so they may be distributed without undo transmission time, and may be processed and selectively stored on a user's RS 400 unit." Col. 9, lines 30-34: "<u>Advertisements 280 may be presented</u> to the user on an individual basis from queues of advertisements that are constructed off-line by business system 130, and sent to file server 205 where they are accessible to each RS 400."

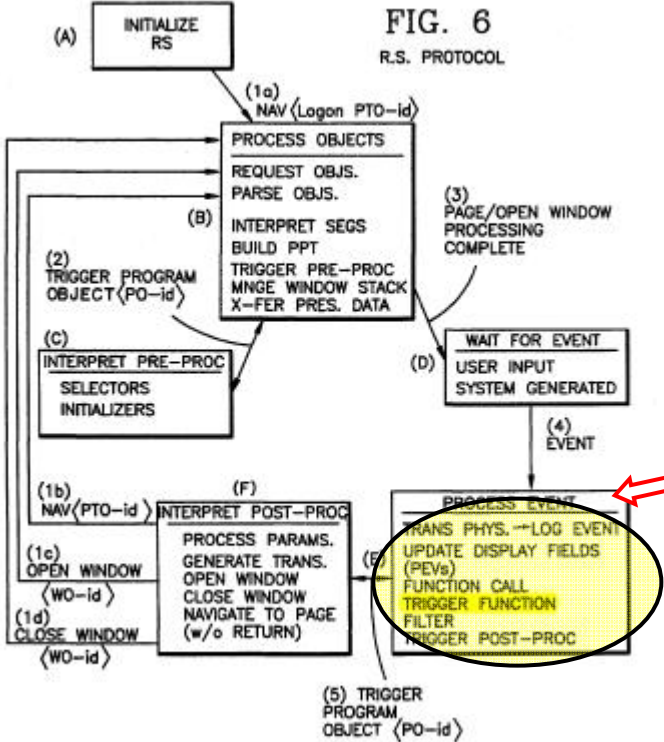| U.S. Pat. No 6,067, 525 claim 40	U.S. Pat. No 6,067,525 claim 40 with Court's claim construction	Filepp et al U.S. Pat. No. 5,347,632
A computer implemented sales system used to facilitate a sales process, the system comprising:	A computer implemented sales system used to facilitate a sales process, the system comprising:	The preamble is not a limitation, nonetheless abstract: "An interactive <u>computer</u> system that enables a user to… perform desired transactions such as banking and shopping…" Col. 6 Lines 56-61: "Services available to the user include…the purchase of items such as retail merchandise and groceries… and <u>buy/sell</u> orders for stocks and bonds."
<u>a plurality of subsystems</u> configured to facilitate one or more actions performed during at least one phase of the sales process; and	a plurality of **[systems that are part of a larger system]** configured to electronically facilitate actions performed during the sales process; and	 RECEPTION SYSTEM LAYERS FIG. 7 Col. 3 lines 27-34: "In preferred form the reception system further comprises…a <u>plurality of</u>

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U.S. Pat. No 6,067, 525 claim 40	U.S. Pat. No 6,067,525 claim 40 with Court's claim construction	Filepp et al U.S. Pat. No. 5,347,632
		partitioned applications; and object processing means…for selecting and retrieving objects…and interpreting and executing the partitioned applications"
		Col. 5 lines 26-27:
		"Each application partition is an independent, self-contained unit and can operate correctly by itself."
a plurality of subsystems configured to facilitate one or more actions performed during at least one phase of the sales process; and		Col. 6 lines 45-68:
		"Services available to the user include display of information such as movie reviews, the latest news, airlines reservations, the purchase of items such as retail merchandise and groceries, and quotes and buy/sell orders for stocks and bonds. Network 10 provides an environment in which a user, via RS 400 establishes a session with the network and accesses a large number of services. These services are specifically constructed applications which as noted are partitioned so they may be distributed without undo transmission time, and may be processed and selectively stored on a user's RS 400 unit."
a plurality of subsystems configured to facilitate one or more actions performed during at least one phase of the sales process; and		Col. 9, lines 30-34:
		"Advertisements 280 may be presented to the user on an individual basis from queues of advertisements that are constructed off-line by business system 130, and sent to file server 205 where they are accessible to each RS 400."

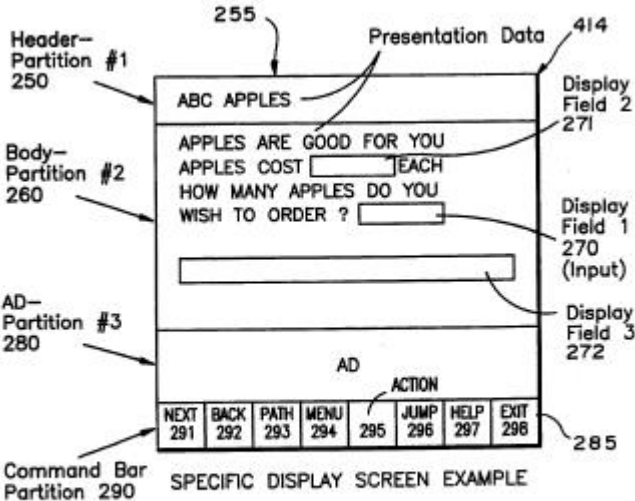| U.S. Pat. No 6,067, 525 claim 40	U.S. Pat. No 6,067,525 claim 40 with Court's claim construction	Filepp et al U.S. Pat. No. 5,347,632

U.S. Pat. No 6,067, 525 claim 40	U.S. Pat. No 6,067,525 claim 40 with Court's claim construction	Filepp et al U.S. Pat. No. 5,347,632
an <u>event manager, coupled to the subsystems</u>, the event manager detecting one or more changes in state characteristic of an event occurring within the system	**[hardware and/or software]** coupled to the **[systems that are part of a larger system]** and configured to detect one or more **[a change in a unique configuration of information within the system that is indicative of the occurrence of an event within the system** occurring in the system,	 **Col. 82 lines 30-59:** "Again with reference to FIG. 7, native software 420 ... is composed of two components: the service software 430 and the operating environment 450. … Service software 430 provides functions specific to providing interaction between the user and interactive network 10 ... Service software 430 is comprised of modules, which are device-independent software components that together obtain, interpret and store partitioned applications existing as a collection of objects. The functions performed by, and the relationship between, the service software 430 module is shown in FIG. 8 and discussed further below."

Within the rightmost cell figure:

Subsystems

Event Manager

PARTITIONED APPLICATIONS
- LINKED PAGE TEMPLATE OBJECTS
- PAGE ELEMENT OBJECTS
- PROGRAM OBJECTS AND PROCESSORS
- TRANSACTION MESSAGE

410
430
SERVICE SOFTWARE KERNAL 432
420 LOGICAL OPERATING SYSTEM 433
450 PC SPECIFIC MULTI – TASKER
PC SPECIFIC OPERATING SYSTEM 451
400
RECEPTION SYSTEM LAYERS
FIG. 7

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U.S. Pat. No 6,067,525 claim 40	U.S. Pat. No 6,067,525 claim 40 with Court's claim construction	Filepp et al U.S. Pat. No. 5,347,632
		Col. 83 lines 12-21: "RS native software provides a virtual machine interface for partitioned applications, such that all objects comprising partitioned applications "see" the same machine. RS native software provides support for the following functions: (1) keyboard and mouse input; (2) text and graphics display; (3) application interpretation; (4) application database management; (5) local application storage; (6) network and link level communications; (7) user activity data collection; and (8) advertisement management." Col. 8 lines 9-14: "The RS 400 is the point of application session control because it has the ability to <u>select</u> and randomly access objects representing all or part of partitioned applications and their data. RS 400 processes objects according to information contained therein and events created by the user on personal computer 405." Col. 3 lines 27-34: "In preferred form the reception system further comprises… objects comprising a <u>plurality of partitioned applications</u>; and object processing means…for selecting and retrieving objects…and interpreting and executing the partitioned applications" Col. 6 lines 3-9:

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U.S. Pat. No 6,067, 525 claim 40	U.S. Pat. No 6,067,525 claim 40 with Court's claim construction	Filepp et al U.S. Pat. No. 5,347,632
an event manager, <u>coupled</u> to the subsystems, the event manager detecting one or more changes in state characteristic of an event occurring within the system an event manager, coupled to the subsystems, the event manager <u>detecting one or more changes in state characteristic</u> of an event occurring within the system		"The RS 400 supports a protocol by which the user and the <u>partitioned applications communicate</u>. All partitioned applications are designed knowing that this protocol will be supported in RS 400. Hence, replication of the protocol in each partitioned application is avoided, thereby minimizing the size of the partitioned application." Col. 101 lines 53-54: "<u>receiving requests</u> for partitioned applications at the reception system."

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U.S. Pat. No 6,067, 525 claim 40	U.S. Pat. No 6,067,525 claim 40 with Court's claim construction	Filepp et al U.S. Pat. No. 5,347,632

U.S. Pat. No 6,067, 525 claim 40	U.S. Pat. No 6,067,525 claim 40 with Court's claim construction	Filepp et al U.S. Pat. No. 5,347,632
inferring occurrence of the event and a context in which the event occurred based at least in part on the detected changes in state, and	[logical process by which the fact that the event has occurred is derived by application of logical rules] and [logical process by which the fact that information already existing within the system that becomes relevant upon the occurrence of the event is derived by application of logical rules] based at least in part on the detected changes in state; and	 Col. 14 lines 52-55: "Program events will be specified in logical terms and will be mapped by the reception system to specific physical triggers…" Col. 81 lines 43-51: "Certain inputs, such as RETURN or mouse clicks in particular fields, are mapped to logical events by keyboard manager 434, which are called completion (or commit) events. Completion events signify the

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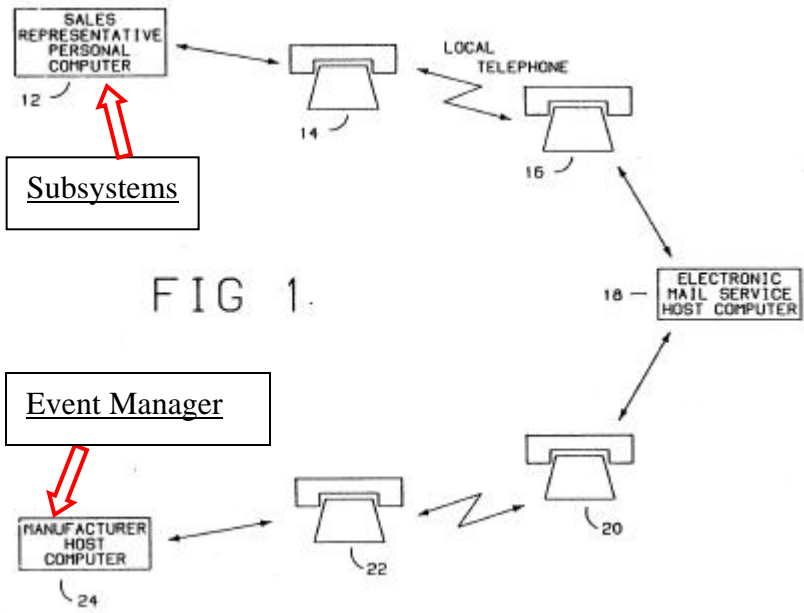| U.S. Pat. No 6,067, 525 claim 40	U.S. Pat. No 6,067,525 claim 40 with Court's claim construction	Filepp et al U.S. Pat. No. 5,347,632
		completion of some selection or specification process associated with the partitioned application and trigger a partition level and/or page level post-processor to process the 'action' parameters associated with the user's selection and commit event." Col. 39 lines 60-66: "Reception system is aware of the occurrence of physical events during the…interactive sessions. When a physical event such as the depression of a …key corresponds to a logical event such as the completion of data entry in a field…"
inferring occurrence of the event and a context in which the event occurred based at least in part on the detected changes in state, and		Col. 73 lines 52-64: "Through this interaction, the user is able to input data into fields provided as part of the display, or may individually select choices causing a standard or personalized page to be built (as explained below) for display on the monitor of personal computer 405. Such inputs will cause RS 400 [reception system] to interpret events and trigger pre-processors or post-processors, retrieve specified objects, communicate with system components, control user options, cause the display of advertisements on a page, open or close window partitions to provide additional navigation possibilities, and collect and report data about events, including certain types of objects processed." Col. 5, line 55 – Col. 6 line 9: "Objects carry application programs and information for display at monitor screen 414 of RS 400. Application program objects, called pre-

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U.S. Pat. No 6,067, 525 claim 40	U.S. Pat. No 6,067,525 claim 40 with Court's claim construction	Filepp et al U.S. Pat. No. 5,347,632
		processor and post-processors, set up the environment for the user's interaction with network 10 and respond to events created when the user inputs information at keyboard 424 of RS 400. Such events typically trigger a program object to be processed, causing one of the following: sending of transactional information to the coapplications in one layer of the network 10; the receiving of information for use in programs or for presentation in application-dependent fields on monitor screen 414; or the requesting of a new objects to be processed by RS 400. Such objects may be part of the same application or a completely new application. The RS 400 supports a protocol by which the user and the partitioned applications communicate. All partitioned applications are designed knowing that this protocol will be supported in RS 400. Hence, replication of the protocol in each partitioned application is avoided, thereby minimizing the size of the partitioned application. Col. 6 lines 10-12: RS 400 includes a means to communicate with network 10 to retrieve objects in response to events occurring at RS 400 and to send and receive messages. Col. 7 lines 35-46: Objects may contain: control information; program instruction to set up an application processing environment and to process user or network created events; information about what is to be displayed and how it is to be displayed; references to programs to be interpretively executed; and references to other objects, which may be called based upon certain conditions or the occurrence of certain events at the user's personal

U.S. Pat. No 6,067, 525 claim 40	U.S. Pat. No 6,067,525 claim 40 with Court's claim construction	Filepp et al U.S. Pat. No. 5,347,632
inferring occurrence of the event and a context in which the event occurred based at least in part on the detected changes in state, and		computer, resulting in the selection and retrieval of other partitioned applications packaged as objects. Col. 8 lines 2-8: If such objects are requested by the RS 400, the cache/concentrator 302 automatically requests the object from file server 205. The requested object is routed back to the requesting cache/concentrator 302, which automatically routes it to the communications line on which the request was originally made, from which it is received by the RS 400. Col. 9, lines 35-47: Individual queues of advertisements are constructed based upon data collected on the partitioned applications that were accessed by a user, and upon events the user generated in response to applications. The data are collected and reported by RS 400 to a data collection co-application in file server 205 for later transmission to business system 130. In addition to application access and use characteristics, a variety of other parameters, such as user demographics or postal ZIP code, may be used as targeting criteria. From such data, queues of advertisements are constructed and targeted to either individual users or to sets of users who fall into certain groups according such parameters. Col. 81 lines 15-22: "This feature enables RS 400 to conditionally deliver information to the user base upon predetermined parameters, such as his personal demographics or locale. For example, the parameters specified may be

U.S. Pat. No 6,067, 525 claim 40	U.S. Pat. No 6,067,525 claim 40 with Court's claim construction	Filepp et al U.S. Pat. No. 5,347,632
		the transaction codes required to retrieve the user's age, sex, and personal interest codes from records contained in user profiles stored at the switch/file server layer 200."
link the inferred event with an <u>action to be performed</u> during the sales process based on prior sales experience using the sales system, and	link the inferred event with an action to be performed during the sales process based on prior sales experience using the sales system, and	Col. 9 lines 30-38: "Advertisements 280 may be presented to the user on an individual basis from queues of advertisements that are constructed off-line by business system 130, and sent to file server 205 where they are accessible to each RS 400. Individual queues of advertisements are constructed based upon data collected on the partitioned applications that were accessed by a user, and upon events the user generated in response to applications." Col. 73 lines 52-64: "Through this interaction, the user is able to input data into fields provided as part of the display, or may individually select choices causing a standard or personalized page to be built (as explained below) for display on the monitor of personal computer 405. Such inputs will cause RS 400 [reception system] to interpret events and <u>trigger pre-processors or post-processors, retrieve specified objects, communicate with system components, control user options, cause the display of advertisements on a page, open or close window partitions to provide additional navigation possibilities, and collect and report data about events, including certain types of objects processed</u>."

U.S. Pat. No 6,067, 525 claim 40	U.S. Pat. No 6,067,525 claim 40 with Court's claim construction	Filepp et al U.S. Pat. No. 5,347,632
automatically initiating an operation in one or more particular subsystems of the computer to facilitate a new action based on the inferred context.	automatically initiating an operation using one or more of the plurality of [systems that are part of a larger system] to facilitate the action to be performed based on the inferred context.

Col. 74 lines 59-62:

"If the functions are part of [reception system] they can be altered or extended… [to] permit the execution of program objects to be triggered…"

Col. 8 lines 24-27: |

U.S. Pat. No 6,067, 525 claim 40	U.S. Pat. No 6,067,525 claim 40 with Court's claim construction	Filepp et al U.S. Pat. No. 5,347,632
automatically initiating an operation in one or more particular subsystems of the computer to facilitate a new action based on the inferred context.		"selecting another partitioned application to be processed upon a user generated completion event for the current partitioned application."

Col. 99 lines 12-16:

The reception system comprising: "object processing means responsive to the input means for selectively retrieving and interpreting objects to extract data and program instructions for composing and generating the partitioned applications…"

FIG. 3b

Col. 95 line 67- Col. 96 line 3:

"The page illustrated in FIG. 3(b) corresponds to a partitioned application

U.S. Pat. No 6,067, 525 claim 40	U.S. Pat. No 6,067,525 claim 40 with Court's claim construction	Filepp et al U.S. Pat. No. 5,347,632
automatically initiating an operation in one or more particular subsystems of the computer to facilitate <u>a new action</u> based on the inferred context. automatically initiating an <u>operation in one or more particular subsystems</u> of the computer to facilitate a new action <u>based on the inferred context</u>.		that <u>permit's</u> [sic] a personal computer user to <u>purchase apples</u>. It shows how the monitor screen 414 of personal computer 405 might appear to the user." Col. 9, lines 35-47: Individual queues of advertisements are constructed based upon data collected on the partitioned applications that were accessed by a user, and upon events the user generated in response to applications. The data are collected and reported by RS 400 to a data collection co-application in file server 205 for later transmission to business system 130. In addition to application access and use characteristics, a variety of other parameters, such as user demographics or postal ZIP code, may be used as targeting criteria. <u>From such data</u>, <u>queues of advertisements are constructed</u> and targeted to either individual users or to sets of users who fall into certain groups according such parameters.

Long et al U.S. Pat. No. 5,117,354 anticipates asserted Claims 1-3, 5-8, 10, 12, 20, 24, 34, 35, 37 and 40

U.S. Pat. No 6,067,525 claim 1	U.S. Pat. No 6,067,525 claim 1 with Court's claim construction	Long et al U.S. Pat. No. 5,117,354
A computer implemented sales system used to facilitate a sales process, the system comprising:	A computer implemented sales system used to facilitate a sales process, the system comprising:	The preamble is not a limitation, nonetheless col. 1 lines 7-13: "… present invention relates to systems for pricing and ordering goods… so that sales representatives can obtain pricing information, and place orders for the goods to be manufactured…"
a plurality of <u>subsystems</u> configured to facilitate one or more actions performed during at least one phase of the sales process; and	a plurality of **[systems that are part of a larger system]** configured to facilitate one or more actions performed during at least one phase of the sales process; and	 Subsystems Event Manager FIG 1. Col. 3 lines 27-34: <u>A variety of sales representatives in the field</u> are each equipped with a <u>personal computer</u> 12 having processing capabilities, local memory and long term storage such as disk drives. Those personal computers 12

U.S. Pat. No 6,067,525 claim 1	U.S. Pat. No 6,067,525 claim 1 with Court's claim construction	Long et al U.S. Pat. No. 5,117,354
		may be installed at the office locations of the sales representatives or may be portable units which they may carry with them to their home or other remote locations. Col. 2 lines 38-45: "…a central data processing facility connected to a telecommunication link to an electronic mail service host, <u>a remote station for a sales representative</u>… an electronic mail serving host,… the manufacturing host…"
an <u>event manager</u>, coupled to the subsystems, the event manager <u>detecting one or more changes in state</u> characteristic of an event occurring within the system	**[hardware and/or software]**, coupled to the **[systems that are part of a larger system]**, the **[hardware and/or software]** detecting one or more **[changes in a unique configuration of information within the system that is indicative of the occurrence of an event within the system]** occurring within the system,	Col. 2 lines 38-45: "…a <u>central data processing facility</u> connected to a telecommunication link to an electronic mail service host, a remote station for a sales representative… an electronic mail serving host,… the manufacturing host…" Co. 9 Lines 5-10: "…software embedded in step 80 [host] …<u>looks for mail placed in its mailbox</u>." Col 10 Lines 21-24: "…the manufacturer host…during its polling of requests and other items placed in its mailbox, <u>senses that an order has been placed</u>…"
<u>inferring occurrence of the event</u> and a context in which the event occurred based at	**[logical process by which the fact that the event has occurred is derived by**	Col. 4 lines 40-41: "The host computer 24 can then calculate out pricing information based

U.S. Pat. No 6,067,525 claim 1	U.S. Pat. No 6,067,525 claim 1 with Court's claim construction	Long et al U.S. Pat. No. 5,117,354
least in part on the detected changes in state, and	**application of logical rules]** and **[logical process by which the fact that information already existing within the system that becomes relevant upon the occurrence of the event is derived by application of logical rules]** based at least in part on the detected changes in state, and	on the items and product IDs." Col. 8 lines 1-3: "Similarly, a manufacturer may maintain a list of standard items available on forty-eight hour stock, which have product ID selections listed" Col. 9 Lines 14-16: "The manufacturer host can then decode each item on the quote and price each item." Col. 10 Lines 24-26: "The manufacturer host proceeds to <u>verify the accuracy of the order</u>…"
automatically initiating an operation in one or more particular subsystems of the computer to facilitate a new action based on the inferred context.	automatically initiating an operation in one or more particular **[systems that are part of a larger system]** of the computer to facilitate a new action based on the inferred context.	Col. 9 Lines 17-24: "The manufacturer host can <u>reassembles the file as a price quoted for transmittal</u>… Again the quote is transmitted into the electronic mail system." Col 10 Lines 27-29: "The manufacturer host…prints the order for scheduling and credit approval"

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U.S. Pat. No 6,067,525 claim 2	U.S. Pat. No 6,067,525 claim 2 with Court's claim construction	Long et al U.S. Pat. No. 5,117,354
A system as recited in claim 1,	A system as recited in claim 1,	[Claim 1 chart incorporated by reference]
wherein the inferred context includes information related to at least one phase of the sales process.	wherein the inferred **[information already existing within the system that becomes relevant upon the occurrence of an event]** includes information related to at least one phase of the sales process.	Col. 4 lines 40-41: "The host computer 24 can then calculate out pricing information based on the items and product IDs." Col. 8 lines 1-3: "Similarly, a manufacturer may maintain a list of standard items available on forty-eight hour stock, which have product ID selections listed" Col. 9 Lines 14-16: "The manufacturer host can then decode each item on the quote and price each item." Col. 10 Lines 24-26: "The manufacturer host proceeds to verify the accuracy of the order…"

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U.S. Pat. No 6,067,525 claim 3	U.S. Pat. No 6,067,525 claim 3 with Court's claim construction	Long et al U.S. Pat. No. 5,117,354
A system as recited in claim 1,	A system as recited in claim 1,	[Claim 1 chart incorporated by reference]
wherein the inferred context includes information related to whether a previous event has occurred in the sales process.	wherein the inferred **[information already existing within the system that becomes relevant upon the occurrence of an event]** includes information related to whether a previous event has occurred in the sales process.	Col. 4 lines 40-41: "The host computer 24 can then calculate out pricing information based on the items and product IDs." Col. 8 lines 1-3: "Similarly, a manufacturer may maintain a list of standard items available on forty-eight hour stock, which have product ID selections listed" Col. 9 Lines 14-16: "The manufacturer host can then decode each item on the quote and price each item." Col. 10 Lines 24-26: "The manufacturer host proceeds to verify the accuracy of the order…"

U.S. Pat. No 6,067,525 claim 5	U.S. Pat. No 6,067,525 claim 5 with Court's claim construction	Long et al U.S. Pat. No. 5,117,354
A system as recited in claim 1, wherein the plurality of subsystems comprises:	A system as recited in claim 1, wherein the plurality of **[systems that are parts of a larger system]** comprises:	[Claim 1 chart incorporated by reference]
a time with customer subsystem configured to convert a lead to a buying customer, so as to close a sale; and	a time with customer **[system that is part of a larger system]** configured to convert a lead to a buying customer, so as to close a sale; and	Col. 3 lines 27-34: A variety of sales representatives in the field are each equipped with a personal computer 12 having processing capabilities, local memory and long term storage such as disk drives. Those personal computers 12 may be installed at the office locations of the sales representatives or may be portable units which they may carry with them to their home or other remote locations. Col. 10 lines 37-45: "Another option available within the system available to the sales representative on his personal computer 12 is to print what is called a submittal report. … A submittal report is a form for submission to the customer in the customer's own desired format and style that is, in essence, a bid on a particular job or project."
a lead generation subsystem configured to convert a name to a potential customer.	a lead generation **[system that is a part of a larger system]** configured to convert a name to a potential customer.	Col. 3 lines 27-34: A variety of sales representatives in the field are each equipped with a personal computer 12 having processing capabilities, local memory and long term storage such as disk drives. Those personal computers 12 may be installed at the office locations of the sales representatives or may be portable units which they may carry with them to their home or other remote locations.

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U.S. Pat. No 6,067,525 claim 5	U.S. Pat. No 6,067,525 claim 5 with Court's claim construction	Long et al U.S. Pat. No. 5,117,354
		Col. 10 lines 37-45: "Another option available within the system available to the sales representative on his personal computer 12 is to print what is called a submittal report. … A submittal report is a form for submission to the customer in the customer's own desired format and style that is, in essence, a bid on a particular job or project."

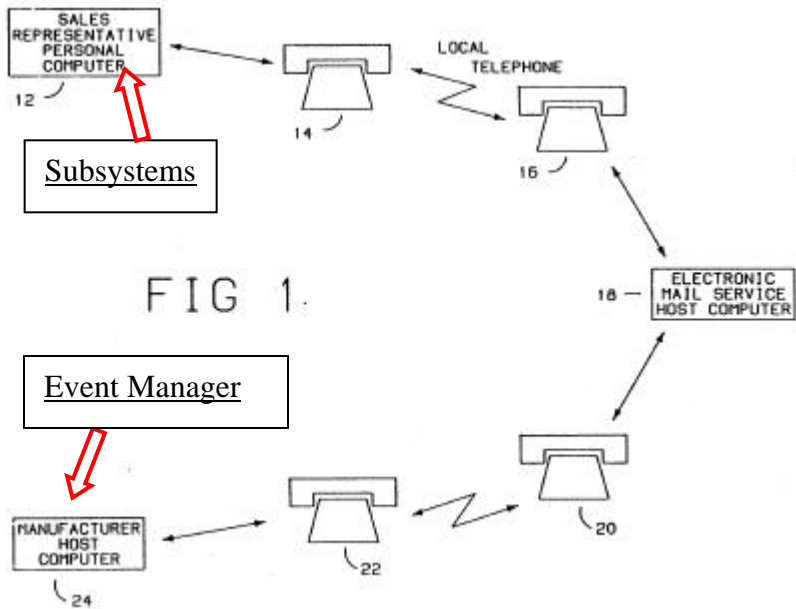| U.S. Pat. No 6,067,525 claim 6	U.S. Pat. No 6,067,525 claim 6 with Court's claim construction	Long et al U.S. Pat. No. 5,117,354
A system as recited in claim 1, wherein the plurality of subsystems comprises; [sic]	A system as recited in claim 1, wherein the plurality of **[systems that are parts of a larger system] comprises;** [sic]	[Claim 1 chart incorporated by reference]
a time with customer subsystem configured to convert a lead to a buying customer, so as to close a sale; and	a time with customer **[system that is part of a larger system]** configured to convert a lead to a buying customer, so as to close a sale; and	Col. 3 lines 27-34: A variety of sales representatives in the field are each equipped with a personal computer 12 having processing capabilities, local memory and long term storage such as disk drives. Those personal computers 12 may be installed at the office locations of the sales representatives or may be portable units which they may carry with them to their home or other remote locations. Col. 10 lines 37-45: "Another option available within the system available to the sales representative on his personal computer 12 is to print what is called a submittal report. … A submittal report is a form for submission to the customer in the customer's own desired format and style that is, in essence, a bid on a particular job or project."
an order management subsystem configured to convert the sale such that a product or service delivered matches a product or service sold.	an order management **[system that is part of a larger system]** configured to convert the sale such that a product or service delivered matches a product or service	Col. 9 line 65 – Col. 10 line 37: The order transmittal information required includes invoice name and address, an order number, a customer order number, a ship to address and other information such as shipping date, telephone numbers for inquiries and special shipping instructions. Before the order is transmitted the program proceeds to program step 106 in which job

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U.S. Pat. No 6,067,525 claim 6	U.S. Pat. No 6,067,525 claim 6 with Court's claim construction	Long et al U.S. Pat. No. 5,117,354
	sold.	information questionaire (JIQ) entry information is requested from the user. This information includes information about the project for which the materials are being ordered, such as the project name, address, the name and address of the general and subcontractors, name and address of bonding agencies and name and address of the project owner. Because such JIQ information is required by the manufacturer to properly fill such an order, the program will refuse to advance to order transmittal until the requested JIQ information is supplied.

Once the appropriate information has been assembled, at program step 108 the priced quote is retrieved from disk, indicated at 110 and is transmitted to the manufacturer as an order with the completed order transmittal and JIQ information via the electronic mail link.

At the manufacturer, the manufacturer host computer, during its periodic polling of requests and other items placed in its mailbox, senses that an order has been placed in its electronic mailbox and downloads the order at program step 112. Then the manufacturer host proceeds to verify the accuracy of the order at program step 114 and, assuming that it is accurate, prints the order for scheduling and credit approval at 116 resulting in an order number 118 in hard copy. A copy of the hard copy printout from step 118 is sent to the sales representative to confirm receipt and processing of the order. This is the end, indicated at 120, of the ordering process. The goods are then manufactured and shipped in accordance with the order instructions. Order confirmation can be retransmitted back to the sales representative, as desired, again using the electronic mail linkage. |

U.S. Pat. No 6,067,525 claim 7	U.S. Pat. No 6,067,525 claim 7 with Court's claim construction	Long et al U.S. Pat. No. 5,117,354
A system as recited in claim 1, wherein the plurality of subsystems comprises:	A system as recited in claim 1, wherein the plurality of **[systems that are parts of a larger system]** comprises:	[Claim 1 chart incorporated by reference]
a time with customer subsystem configured to convert a lead to a buying customer, so as to close a sale; and	a time with customer **[system that is part of a larger system]** configured to convert a lead to a buying customer, so as to close a sale; and	Col. 3 lines 27-34: A variety of sales representatives in the field are each equipped with a personal computer 12 having processing capabilities, local memory and long term storage such as disk drives. Those personal computers 12 may be installed at the office locations of the sales representatives or may be portable units which they may carry with them to their home or other remote locations. Col. 10 lines 37-45: "Another option available within the system available to the sales representative on his personal computer 12 is to print what is called a submittal report. … A submittal report is a form for submission to the customer in the customer's own desired format and style that is, in essence, a bid on a particular job or project."
a customer retention subsystem configured to convert an existing customer into a lead, so as to generate repeat sales.	a customer retention **[system that is part of a larger system]** configured to convert an existing customer into a lead, so as to generate repeat sales.	Col. 3 lines 27-34: A variety of sales representatives in the field are each equipped with a personal computer 12 having processing capabilities, local memory and long term storage such as disk drives. Those personal computers 12 may be installed at the office locations of the sales representatives or may be portable units which they may carry with them to their home or other remote locations.

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U.S. Pat. No 6,067,525 claim 7	U.S. Pat. No 6,067,525 claim 7 with Court's claim construction	Long et al U.S. Pat. No. 5,117,354
		Col. 10 lines 37-45: "Another option available within the system available to the sales representative on his personal computer 12 is to print what is called a submittal report. … A submittal report is a form for submission to the customer in the customer's own desired format and style that is, in essence, a bid on a particular job or project."

U.S. Pat. No 6,067,525 claim 8	U.S. Pat. No 6,067,525 claim 8 with Court's claim construction	Long et al U.S. Pat. No. 5,117,354
A system as recited in claim 1, wherein the plurality of subsystems comprises:	A system as recited in claim 1, wherein the plurality of **[systems that are parts of a larger system]** comprises:	[Claim 1 chart incorporated by reference]
a time with customer subsystem configured to convert a lead to a buying customer and prompting the buying customer to make a buying decision, so as to close a sale; and	a time with customer **[system that is part of a larger system]** configured to convert a lead to a buying customer and prompting the buying customer to make a buying decision, so as to close a sale; and	Col. 3 lines 27-34: A variety of sales representatives in the field are each equipped with a personal computer 12 having processing capabilities, local memory and long term storage such as disk drives. Those personal computers 12 may be installed at the office locations of the sales representatives or may be portable units which they may carry with them to their home or other remote locations. Col. 10 lines 37-45: "Another option available within the system available to the sales representative on his personal computer 12 is to print what is called a submittal report. … A submittal report is a form for submission to the customer in the customer's own desired format and style that is, in essence, a bid on a particular job or project."
a self management subsystem configured to assist a salesperson in managing sales information.	a self management **[system that is part of a larger system]** configured to assist a salesperson in managing sales information.	Col. 10 lines 63-65: "The last option available on the system is maintenance of the parameters for the system maintained at the personal computer 12." Col. 11 lines 1-14: "The first option available if system maintenance is to be performed is

U.S. Pat. No 6,067,525 claim 8	U.S. Pat. No 6,067,525 claim 8 with Court's claim construction	Long et al U.S. Pat. No. 5,117,354
		to create set up files indicated by program step 140. These are the files used to set parameters for printing and formatting of the submittal reports to be prepared for particular customers. … Another system maintenance option available is to edit and create product IDs indicated at program step 148."

U.S. Pat. No 6,067,525 claim 10	U.S. Pat. No 6,067,525 claim 10 with Court's claim construction	Long et al U.S. Pat. No. 5,117,354
A system as recited in claim 1, wherein the plurality of subsystems comprises:	A system as recited in claim 1, wherein the plurality of **[systems that are parts of a larger system]** comprises:	[Claim 1 chart incorporated by reference]
a time with customer subsystem configured to convert a lead to a buying customer, so as to close a sale; and	a time with customer **[system that is part of a larger system]** configured to convert a lead to a buying customer, so as to close a sale; and	Col. 3 lines 27-34: A variety of sales representatives in the field are each equipped with a personal computer 12 having processing capabilities, local memory and long term storage such as disk drives. Those personal computers 12 may be installed at the office locations of the sales representatives or may be portable units which they may carry with them to their home or other remote locations. Col. 10 lines 37-45: "Another option available within the system available to the sales representative on his personal computer 12 is to print what is called a submittal report. … A submittal report is a form for submission to the customer in the customer's own desired format and style that is, in essence, a bid on a particular job or project."
a sales management subsystem configured to assist a sales manager in managing a plurality of salespeople.	a sales management **[system that is part of a larger system]** configured to assist a sales manager in managing a plurality of salespeople.	Col. 6 lines 6-16: "Because many sales representatives will deal repetitively with the same customers, and because the creation of a submittal form for a particular customer may require a significant amount of time and effort, the system then allows, at program step 40, for the sales representative to save a file on disk storage with the file consisting of a set up file containing information on the custom fields necessary for a submittal

U.S. Pat. No 6,067,525 claim 10	U.S. Pat. No 6,067,525 claim 10 with Court's claim construction	Long et al U.S. Pat. No. 5,117,354
		document prepared in accordance with the wishes of the particular customer."

U.S. Pat. No 6,067,525 claim 12	U.S. Pat. No 6,067,525 claim 12 with Court's claim construction	Long et al U.S. Pat. No. 5,117,354
A system as recited in claim 1, wherein the plurality of subsystems comprises:	A system as recited in claim 1, wherein the plurality of **[systems that are parts of a larger system]** comprises:	[Claim 1 chart incorporated by reference]
a lead management subsystem configured to manage a conversion of a lead to a prospect and of the prospect to a buying customer, and	a lead management **[system that is part of a larger system]** configured to manage a conversion of a lead to a prospect and of the prospect to a buying customer, and	Col. 3 lines 27-34: A variety of sales representatives in the field are each equipped with a personal computer 12 having processing capabilities, local memory and long term storage such as disk drives. Those personal computers 12 may be installed at the office locations of the sales representatives or may be portable units which they may carry with them to their home or other remote locations. Col. 10 lines 37-45: "Another option available within the system available to the sales representative on his personal computer 12 is to print what is called a submittal report. … A submittal report is a form for submission to the customer in the customer's own desired format and style that is, in essence, a bid on a particular job or project."
a self management subsystem configured to assist a salesperson in managing sales information.	a self management **[system that is part of a larger system]** configured to assist a salesperson in managing sales information.	Col. 10 lines 63-65: "The last option available on the system is maintenance of the parameters for the system maintained at the personal computer 12." Col. 11 lines 1-14: "The first option available if system maintenance is to be performed is

		to create set up files indicated by program step 140. These are the files used to set parameters for printing and formatting of the submittal reports to be prepared for particular customers. … Another system maintenance option available is to edit and create product IDs indicated at program step 148."

U.S. Pat. No 6,067,525 claim 20	U.S. Pat. No 6,067,525 claim 20 with Court's claim construction	Long et al U.S. Pat. No. 5,117,354
A method of facilitating a sales process using a computer arrangement having a plurality of subsystems configured to facilitate one or more actions performed during at least one phase of the sales process, the method comprising the steps of:	A method of facilitating a sales process using a computer arrangement having a plurality of **[systems that are part of a larger system]** configured to facilitate one or more actions performed during at least one phase of the sales process, the method comprising the steps of:	The preamble is not a limitation, nonetheless col. 1 lines 7-13: "… present invention relates to systems for pricing and ordering goods… so that sales representatives can obtain pricing information, and place orders for the goods to be manufactured…" FIG 1. Col. 3 lines 27-34: A variety of sales representatives in the field are each equipped with a personal computer 12 having processing capabilities, local memory and long term storage such as disk drives. Those personal computers 12

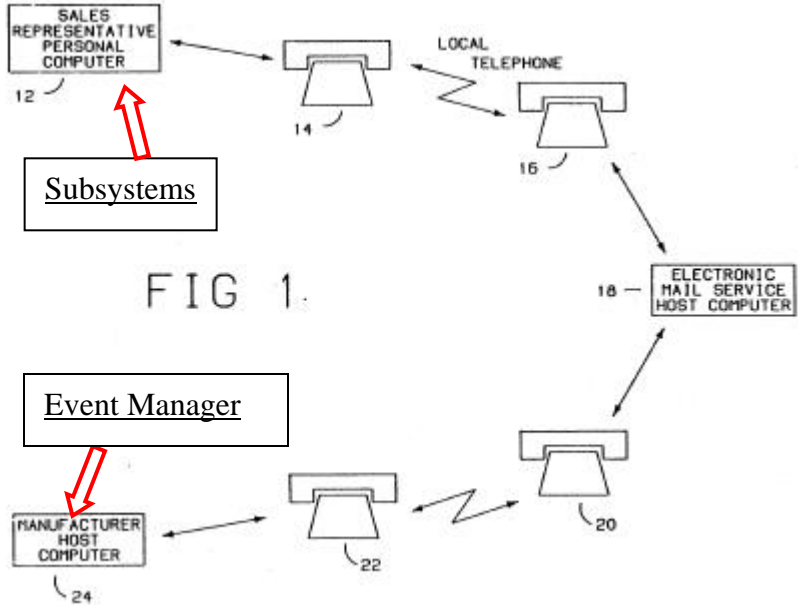| U.S. Pat. No 6,067,525 claim 20	U.S. Pat. No 6,067,525 claim 20 with Court's claim construction	Long et al U.S. Pat. No. 5,117,354
		may be installed at the office locations of the sales representatives or may be portable units which they may carry with them to their home or other remote locations. Col. 2 lines 38-45: "…a central data processing facility connected to a telecommunication link to an electronic mail service host, <u>a remote station for a sales representative</u>… an electronic mail serving host,… the manufacturing host…"
automatically detecting one or more changes in state characteristic of an event occurring in the sales process;	automatically detecting one or more **[changes in a unique configuration of information within the system that is indicative of the occurrence of an event within the system]** occurring in the sales process;	Co. 9 Lines 5-10: "…software embedded in step 80 [host] …<u>looks for mail placed in its mailbox</u>." Col 10 Lines 21-24: "…the manufacturer host…during its polling of requests and other items placed in its mailbox, <u>senses that an order has been placed</u>…"
inferring occurrence of the event and a context in which the event occurred based at least in part on the detected changes in state; and	**[logical process by which the fact that the event has occurred is derived by application of logical rules]** and **[logical process by which the fact that information already existing within the system that becomes relevant upon the occurrence of the event**	Col. 4 lines 40-41: "The host computer 24 can then calculate out pricing information based on the items and product IDs." Col. 8 lines 1-3: "Similarly, a manufacturer may maintain a list of standard items available on forty-eight hour stock, which have product ID selections

U.S. Pat. No 6,067,525 claim 20	U.S. Pat. No 6,067,525 claim 20 with Court's claim construction	Long et al U.S. Pat. No. 5,117,354
	is derived by application of logical rules] based at least in part on the detected changes in state; and	listed" Col. 9 Lines 14-16: "The manufacturer host can then decode each item on the quote and price each item." Col. 10 Lines 24-26: "The manufacturer host proceeds to <u>verify the accuracy of the order</u>…"
automatically initiating an operation in one or more particular subsystems of the computer to facilitate a new action based on the inferred context.	automatically initiating an operation in one or more particular **[systems that are part of a larger system]** of the computer to facilitate a new action based on the inferred context.	Col. 9 Lines 17-24: "The manufacturer host can <u>reassembles the file as a price quoted for transmittal</u>… Again the quote is transmitted into the electronic mail system." Col 10 Lines 27-29: "The manufacturer host…prints the order for scheduling and credit approval"

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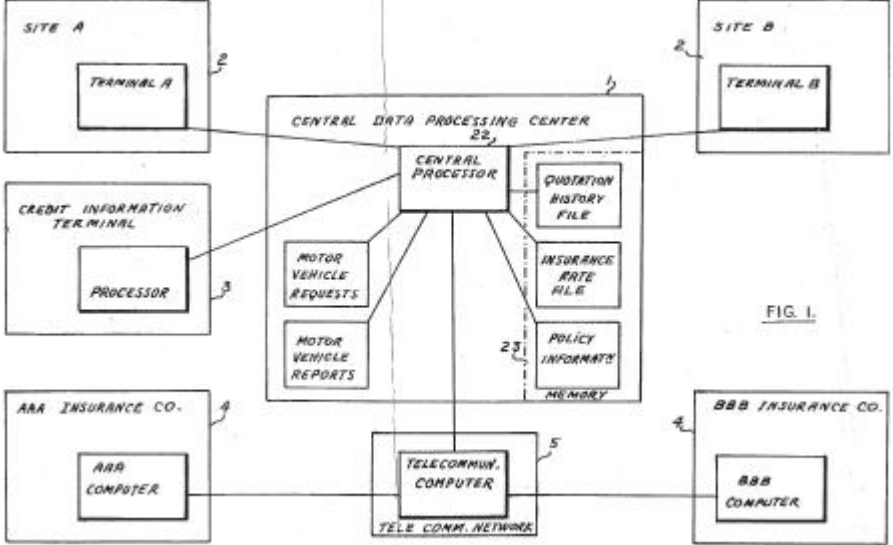| U.S. Pat. No 6,067,525 claim 24	U.S. Pat. No 6,067,525 claim 24 with Court's claim construction	Long et al U.S. Pat. No. 5,117,354
A method as recited in claim 20,	A method as recited in claim 20,	[Claim 20 chart incorporated by reference]
wherein the inferred context includes information related to at least one phase of the sales process.	wherein the inferred **[information already existing within the system that becomes relevant upon the occurrence of an event]** includes information related to at least one phase of the sales process.	Col. 4 lines 40-41: "The host computer 24 can then calculate out pricing information based on the items and product IDs." Col. 8 lines 1-3: "Similarly, a manufacturer may maintain a list of standard items available on forty-eight hour stock, which have product ID selections listed" Col. 9 Lines 14-16: "The manufacturer host can then decode each item on the quote and price each item." Col. 10 Lines 24-26: "The manufacturer host proceeds to verify the accuracy of the order…"

U.S. Pat. No 6,067,525 claim 34	U.S. Pat. No 6,067,525 claim 34 with Court's claim construction	Long et al U.S. Pat. No. 5,117,354
A method as recited in claim 20, further comprising the steps of:	A method as recited in claim 20, further comprising the steps of:	[Claim 20 chart incorporated by reference]
inferring occurrence of an event while converting a lead to a buying customer; and	[logical process by which the fact that the event has occurred is derived by application of logical rules] while converting a lead to a buying customer; and	Col. 3 lines 27-34: A variety of sales representatives in the field are each equipped with a personal computer 12 having processing capabilities, local memory and long term storage such as disk drives. Those personal computers 12 may be installed at the office locations of the sales representatives or may be portable units which they may carry with them to their home or other remote locations. Col. 10 lines 37-45: "Another option available within the system available to the sales representative on his personal computer 12 is to print what is called a submittal report. … A submittal report is a form for submission to the customer in the customer's own desired format and style that is, in essence, a bid on a particular job or project."
using the particular subsystem to convert an existing customer into a lead, so as to generate repeat sales.	using the particular [system that is part of a larger system] to convert an existing customer into a lead, so as to generate repeat sales.	Col. 3 lines 27-34: A variety of sales representatives in the field are each equipped with a personal computer 12 having processing capabilities, local memory and long term storage such as disk drives. Those personal computers 12 may be installed at the office locations of the sales representatives or may be portable units which they may carry with them to their home or other remote locations.

U.S. Pat. No 6,067,525 claim 34	U.S. Pat. No 6,067,525 claim 34 with Court's claim construction	Long et al U.S. Pat. No. 5,117,354
		Col. 10 lines 37-45: "Another option available within the system available to the sales representative on his personal computer 12 is to print what is called a submittal report. … A submittal report is a form for submission to the customer in the customer's own desired format and style that is, in essence, a bid on a particular job or project."

U.S. Pat. No 6,067,525 claim 35	U.S. Pat. No 6,067,525 claim 35 with Court's claim construction	Long et al U.S. Pat. No. 5,117,354
A method as recited in claim 20, further comprising the steps of:	A method as recited in claim 20, further comprising the steps of:	[Claim 20 chart incorporated by reference]
inferring occurrence of an event while converting a lead to a buying customer and prompting the buying customer to make a buying decision; and	**[logical process by which the fact that the event has occurred is derived by application of logical rules]** while converting a lead to a buying customer and prompting the buying customer to make a buying decision; and	Col. 3 lines 27-34: A variety of sales representatives in the field are each equipped with a personal computer 12 having processing capabilities, local memory and long term storage such as disk drives. Those personal computers 12 may be installed at the office locations of the sales representatives or may be portable units which they may carry with them to their home or other remote locations. Col. 10 lines 37-45: "Another option available within the system available to the sales representative on his personal computer 12 is to print what is called a submittal report. … A submittal report is a form for submission to the customer in the customer's own desired format and style that is, in essence, a bid on a particular job or project."
using the particular subsystem to assist a salesperson in managing sales information.	using the particular **[system that is part of a larger system]** to assist a salesperson in managing sales information.	Col. 10 lines 63-65: "The last option available on the system is maintenance of the parameters for the system maintained at the personal computer 12." Col. 11 lines 1-14: "The first option available if system maintenance is to be performed is to create set up files indicated by program step 140. These are the files

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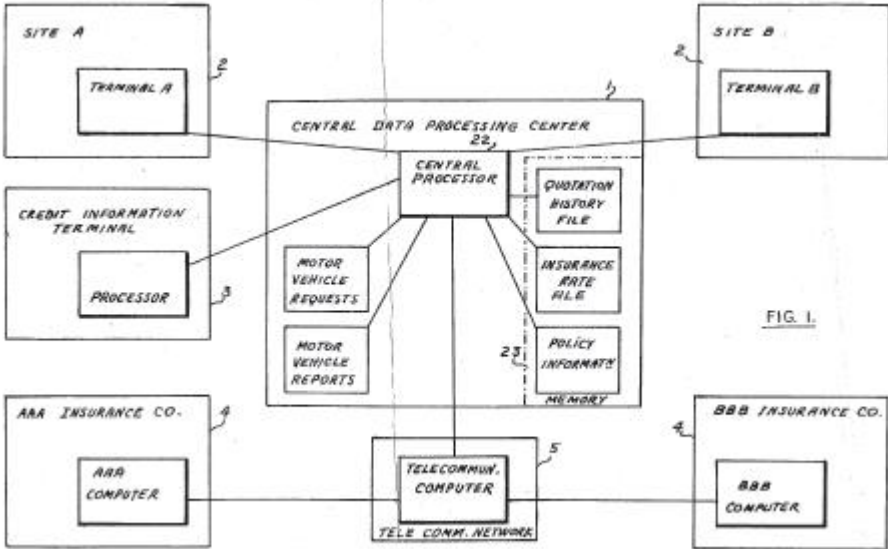| U.S. Pat. No 6,067,525 claim 35	U.S. Pat. No 6,067,525 claim 35 with Court's claim construction	Long et al U.S. Pat. No. 5,117,354
		used to set parameters for printing and formatting of the submittal reports to be prepared for particular customers. … Another system maintenance option available is to edit and create product IDs indicated at program step 148."

U.S. Pat. No 6,067,525 claim 37	U.S. Pat. No 6,067,525 claim 37 with Court's claim construction	Long et al U.S. Pat. No. 5,117,354
A method as recited in claim 20, further comprising the steps of:	A method as recited in claim 20, further comprising the steps of:	[Claim 20 chart incorporated by reference]
inferring occurrence of an event while converting a lead to a buying customer; and	**[logical process by which the fact that the event has occurred is derived by application of logical rules]** while converting a lead to a buying customer; and	Col. 3 lines 27-34: A variety of sales representatives in the field are each equipped with a personal computer 12 having processing capabilities, local memory and long term storage such as disk drives. Those personal computers 12 may be installed at the office locations of the sales representatives or may be portable units which they may carry with them to their home or other remote locations. Col. 10 lines 37-45: "Another option available within the system available to the sales representative on his personal computer 12 is to print what is called a submittal report. … A submittal report is a form for submission to the customer in the customer's own desired format and style that is, in essence, a bid on a particular job or project."
using the particular subsystem to assist a salesperson in managing a plurality of salespeople.	using the particular **[system that is part of a larger system]** to assist a salesperson in managing a plurality of salespeople.	Col. 6 lines 6-16: "Because many sales representatives will deal repetitively with the same customers, and because the creation of a submittal form for a particular customer may require a significant amount of time and effort, the system then allows, at program step 40, for the sales representative to save a file on disk storage with the file consisting of a set up file containing information on the custom fields necessary for a submittal document prepared in accordance with the wishes of the particular customer."

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U.S. Pat. No 6,067, 525 claim 40	U.S. Pat. No 6,067,525 claim 40 with Court's claim construction	Long et al U.S. Pat. No. 5,117,354
A computer implemented sales system used to facilitate a sales process, the system comprising:	A computer implemented sales system used to facilitate a sales process, the system comprising:	The preamble is not a limitation, nonetheless col. 1 lines 7-13: "… present invention relates to systems for pricing and ordering goods… so that sales representatives can obtain pricing information, and place orders for the goods to be manufactured…"
a plurality of subsystems configured to electronically facilitate actions performed during the sales process; and	a plurality of **[systems that are part of a larger system]** configured to electronically facilitate actions performed during the sales process; and	 Subsystems Event Manager FIG 1. Col. 3 lines 27-34: A variety of sales representatives in the field are each equipped with a personal computer 12 having processing capabilities, local memory and long term storage such as disk drives. Those personal computers 12 may be installed at the office locations of the sales representatives or may be portable units which they may carry with them to their home or

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U.S. Pat. No 6,067, 525 claim 40	U.S. Pat. No 6,067,525 claim 40 with Court's claim construction	Long et al U.S. Pat. No. 5,117,354
		other remote locations. Col. 2 lines 38-45: "…a central data processing facility connected to a telecommunication link to an electronic mail service host, <u>a remote station for a sales representative</u>… an electronic mail serving host,… the manufacturing host…"
an event manager coupled to the subsystems and configured to detect one or more changes in state characteristic of an event occurring in the system,	[hardware and/or software] coupled to the [systems that are part of a larger system] and configured to detect one or more [a change in a unique configuration of information within the system that is indicative of the occurrence of an event within the system occurring in the system,	Col. 2 lines 38-45: "…a <u>central data processing facility</u> connected to a telecommunication link to an electronic mail service host, a remote station for a sales representative… an electronic mail serving host,… the manufacturing host…" Co. 9 Lines 5-10: "…software embedded in step 80 [host] …<u>looks for mail placed in its mailbox</u>." Col 10 Lines 21-24: "…the manufacturer host…during its polling of requests and other items placed in its mailbox, <u>senses that an order has been placed</u>…"
infer occurrence of the event and a context in which the event occurred based at least in part on the detected	[logical process by which the fact that the event has occurred is derived by application of logical rules] and [logical process by	Col. 4 lines 40-41: "The host computer 24 can then calculate out pricing information based on the items and product IDs."

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U.S. Pat. No 6,067, 525 claim 40	U.S. Pat. No 6,067,525 claim 40 with Court's claim construction	Long et al U.S. Pat. No. 5,117,354
changes in state,	**which the fact that information already existing within the system that becomes relevant upon the occurrence of the event is derived by application of logical rules]** based at least in part on the detected changes in state; and	Col. 8 lines 1-3: "Similarly, a manufacturer may maintain a list of standard items available on forty-eight hour stock, which have product ID selections listed" Col. 9 Lines 14-16: "The manufacturer host can then decode each item on the quote and price each item." Col. 10 Lines 24-26: "The manufacturer host proceeds to <u>verify the accuracy of the order</u>…"
link the inferred event with an action to be performed during the sales process based on prior sales experience using the sales system, and	link the inferred event with an action to be performed during the sales process based on prior sales experience using the sales system, and	Col. 9 Lines 17-24: "The manufacturer host can <u>reassembles the file as a price quoted for transmittal</u>… Again the quote is transmitted into the electronic mail system." Col 10 Lines 27-29: "The manufacturer host…prints the order for scheduling and credit approval"
automatically initiate an operation using one or more of the plurality of subsystems to facilitate the action to be	automatically initiating an operation using one or more of the plurality of **[systems that are part of a larger system]** to facilitate the	Col. 9 Lines 17-24: "The manufacturer host can <u>reassembles the file as a price quoted for transmittal</u>… Again the quote is transmitted into the electronic mail system."

U.S. Pat. No 6,067, 525 claim 40	U.S. Pat. No 6,067,525 claim 40 with Court's claim construction	Long et al U.S. Pat. No. 5,117,354
performed based on the inferred context.	action to be performed based on the inferred context.	Col 10 Lines 27-29: "The manufacturer host…prints the order for scheduling and credit approval"

Lockwood U.S. Pat. No. 4,567,359 anticipates asserted 1-3, 5-7, 20, 24, 34, and 40

U.S. Pat. No 6,067,525 claim 1	U.S. Pat. No 6,067,525 claim 1 with Court's claim construction	Lockwood U.S. Pat. No. 4,567,359
A computer implemented sales system used to facilitate a sales process, the system comprising:	A computer implemented sales system used to facilitate a sales process, the system comprising:	The preamble is not a limitation, nonetheless abstract: "A system for automatically dispensing information, goods and services to a customer on a self-service basis including a central data processing center in which information on services offered by various institutions in a particular industry is stored." Col. 3, lines 62-68: "FIG. 1 shows an overview of an automatic system for dispensing insurance quotations and policies according to a preferred embodiment of the invention. It will be understood that such a system can be used in a

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U.S. Pat. No 6,067,525 claim 1	U.S. Pat. No 6,067,525 claim 1 with Court's claim construction	Lockwood U.S. Pat. No. 4,567,359
		variety of other service-oriented industries, such as the travel industry, catalogue sales industry, various financial services, and the like." Col. 9 lines 13-19: "The system of this invention allows a customer quick and easy access to insurance quotations from several companies, and allows the customer to make a selection and purchase insurance on a self-service basis. All the necessary operations of obtaining information, checking credit, transmitting information to the respective companies and issuing policies, are carried out automatically." Col. 9 lines 32-35: "It will be clear that this system may be applied to many other types of customer service and sales industries. Some examples are the travel industry, many types of financial services, and catalogue sales industries."

U.S. Pat. No 6,067,525 claim 1	U.S. Pat. No 6,067,525 claim 1 with Court's claim construction	Lockwood U.S. Pat. No. 4,567,359
a plurality of subsystems configured to facilitate one or more actions performed during at least one phase of the sales process; and	a plurality of **[systems that are part of a larger system]** configured to facilitate one or more actions performed during at least one phase of the sales process; and	 See col. 5, lines 37-55; Col. 4, lines 1-6: "The system basically comprises a central data processing center 1 linked to various remote terminals, including one or more information and sales terminals 2, a credit information terminal 3, and data processing terminals 4 of various insurance companies served by the system." Col. 3, lines 5-8: "The central data processing center is suitably also linked to a remote credit information center for checking the credit of a customer in response to a sales order or charging customer's account via debit card." a central data processing center tied to remote insurance company

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U.S. Pat. No 6,067,525 claim 1	U.S. Pat. No 6,067,525 claim 1 with Court's claim construction	Lockwood U.S. Pat. No. 4,567,359
		terminals, transaction terminals, motor vehicle service bureaus and credit information and bank terminals for the preparation, verification and forwarding of insurance quotations and policy execution Col. 5, lines 1-12 A video subsystem 6, which operates to provide video presentations to customers. The presentations solicit and allow the customer to enter information at various points via the touch pad 13 displayed on the monitor screen. Such information is transmitted to peripheral subsystem 7, and eventually to the central data processing center 1.
an <u>event manager</u>, <u>coupled</u> to the subsystems, the event manager detecting one or more changes in <u>state characteristic of an event</u> occurring within the system	**[hardware and/or software]**, coupled to the **[systems that are part of a larger system]**, the **[hardware and/or software]** detecting one or more **[changes in a unique configuration of information within the system that is indicative of the occurrence of an event within the system]** occurring within the system,	Col. 4, lines 1-7: "The system basically comprises a <u>central data processing center</u> 1 linked to various remote terminals, including one or more information and sales terminals 2, a credit information terminal 3, and data processing terminals 4 of various insurance companies served by the system. <u>The terminals are all linked to the central data processing center by any suitable remote links</u>" Col. 6, lines 51-65: "As seen in FIG. 4, the customer is asked (34) to select the type of insurance quotation desired (e.g. automobile 35, homeowner 36, life 37 or health 38). When the type of insurance is selected, a series of pertinent questions (39) for that type of insurance is asked, such as age, gender, marital status, and so on. The customer enters responses (40) on the touch pad, and the responses are shown on the monitor screen and repeated by the voice synthesizer for customer verification. Each valid answer is stored (41) until all necessary information has been gathered. If at any stage, no answer is received (42) within a predetermined time limit (e.g. about 15 seconds), the program assumes that the customer has left the terminal and returns to the ready state 24 to wait for the next customer."

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U.S. Pat. No 6,067,525 claim 1	U.S. Pat. No 6,067,525 claim 1 with Court's claim construction	Lockwood U.S. Pat. No. 4,567,359
		Col. 7, lines 5-10: "Once all the necessary information has been gathered at the terminal (see 44), the processing unit 14 auto-dials the central data processing center 1 (see 45, FIG. 5), sends the gathered information to the center (46) and waits to receive an insurance quotation from each participating company." See col. 7, line 61 – col. 8, line 2: "When the central data processing center receives a quotation request (64) from one of the sales and information terminals 2, it first determines the type of quote requested. The center then locates the appropriate rating information (65) for that type of insurance from the memory, and makes an insurance calculation (66) for each of a series of different insurance companies based on the information received from the customer. A quotation history file stored in the memory is up-dated (67), and the quotation is sent to the terminal (68)."
inferring occurrence of the event and a context in which the event occurred based at least in part on the detected changes in state, and	[logical process by which the fact that the event has occurred is derived by application of logical rules] and [logical process by which the fact that information already existing within the system that becomes relevant upon the occurrence of the event is derived by	See col. 7, line 61 – col. 8, line 2: "When the central data processing center receives a quotation request (64) from one of the sales and information terminals 2, it first determines the type of quote requested. The center then locates the appropriate rating information (65) for that type of insurance from the memory, and makes an insurance calculation (66) for each of a series of different insurance companies based on the information received from the customer. A quotation history file stored in the memory is up-dated (67), and the quotation is sent to the terminal (68)."

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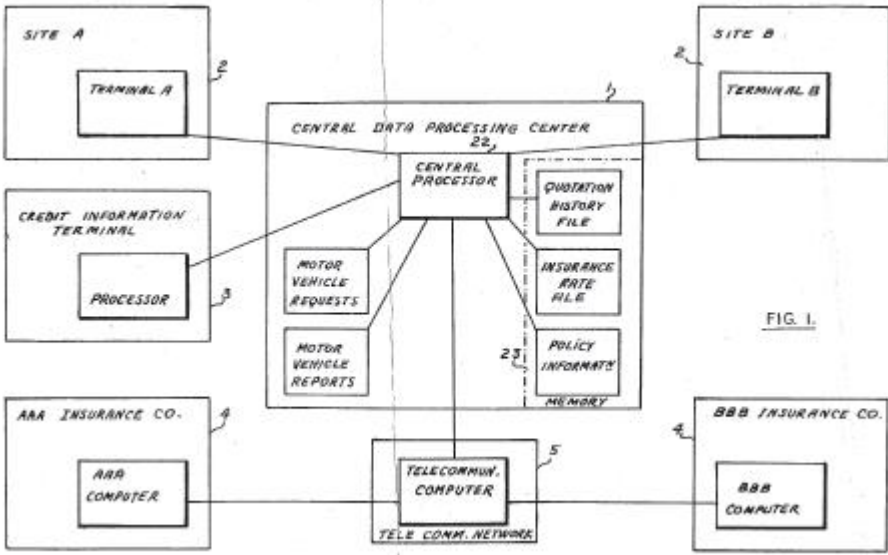| U.S. Pat. No 6,067,525 claim 1	U.S. Pat. No 6,067,525 claim 1 with Court's claim construction	Lockwood U.S. Pat. No. 4,567,359
	application of logical rules] based at least in part on the detected changes in state, and	
automatically initiating an operation in one or more particular subsystems of the computer to facilitate a new action based on the inferred context.	automatically initiating an operation in one or more particular **[systems that are part of a larger system]** of the computer to facilitate a new action based on the inferred context.	See col. 7, line 61 – col. 8, line 2: "When the central data processing center receives a quotation request (64) from one of the sales and information terminals 2, it first determines the type of quote requested. The center then locates the appropriate rating information (65) for that type of insurance from the memory, and makes an insurance calculation (66) for each of a series of different insurance companies based on the information received from the customer. A quotation history file stored in the memory is up-dated (67), and the quotation is sent to the terminal (68)."

U.S. Pat. No 6,067,525 claim 2	U.S. Pat. No 6,067,525 claim 2 with Court's claim construction	Lockwood U.S. Pat. No. 4,567,359
A system as recited in claim 1,	A system as recited in claim 1,	[Claim 1 chart incorporated by reference]
wherein the inferred context includes information related to at least one phase of the sales process.	wherein the inferred **[information already existing within the system that becomes relevant upon the occurrence of an event]** includes information related to at least one phase of the sales process.	See col. 7, line 61 – col. 8, line 2: "When the central data processing center receives a quotation request (64) from one of the sales and information terminals 2, it first determines the type of quote requested. The center then locates the appropriate rating information (65) for that type of insurance from the memory, and makes an insurance calculation (66) for each of a series of different insurance companies based on the information received from the customer. A quotation history file stored in the memory is up-dated (67), and the quotation is sent to the terminal (68)."

U.S. Pat. No 6,067,525 claim 3	U.S. Pat. No 6,067,525 claim 3 with Court's claim construction	Lockwood U.S. Pat. No. 4,567,359
A system as recited in claim 1,	A system as recited in claim 1,	[Claim 1 chart incorporated by reference]
wherein the inferred context includes information related to whether a previous event has occurred in the sales process.	wherein the inferred **[information already existing within the system that becomes relevant upon the occurrence of an event]** includes information related to whether a previous event has occurred in the sales process.	See col. 7, line 61 – col. 8, line 2: "When the central data processing center receives a quotation request (64) from one of the sales and information terminals 2, it first determines the type of quote requested. The center then locates the appropriate rating information (65) for that type of insurance from the memory, and makes an insurance calculation (66) for each of a series of different insurance companies based on the information received from the customer. A quotation history file stored in the memory is up-dated (67), and the quotation is sent to the terminal (68)."

U.S. Pat. No 6,067,525 claim 5	U.S. Pat. No 6,067,525 claim 5 with Court's claim construction	Lockwood U.S. Pat. No. 4,567,359
A system as recited in claim 1, wherein the plurality of subsystems comprises:	A system as recited in claim 1, wherein the plurality of **[systems that are parts of a larger system]** comprises:	[Claim 1 chart incorporated by reference]
a time with customer subsystem configured to convert a lead to a buying customer, so as to close a sale; and	a time with customer **[system that is part of a larger system]** configured to convert a lead to a buying customer, so as to close a sale; and	Col. 4, lines 1-6: "The system basically comprises a central data processing center 1 linked to various remote terminals, including one or more information and sales terminals 2, a credit information terminal 3, and data processing terminals 4 of various insurance companies served by the system." Col. 3, lines 5-8: "The central data processing center is suitably also linked to a remote credit information center for checking the credit of a customer in response to a sales order or charging customer's account via debit card." a central data processing center tied to remote insurance company terminals, transaction terminals, motor vehicle service bureaus and credit information and bank terminals for the preparation, verification and forwarding of insurance quotations and policy execution Col. 5, lines 1-12 A video subsystem 6, which operates to provide video presentations to customers. The presentations solicit and allow the customer to enter information at various points via the touch pad 13 displayed on the monitor screen. Such information is transmitted to peripheral

U.S. Pat. No 6,067,525 claim 5	U.S. Pat. No 6,067,525 claim 5 with Court's claim construction	Lockwood U.S. Pat. No. 4,567,359
		subsystem 7, and eventually to the central data processing center 1.
a lead generation subsystem configured to convert a name to a potential customer.	a lead generation [system that is a part of a larger system] configured to convert a name to a potential customer.	Col. 4, lines 1-6: "The system basically comprises a central data processing center 1 linked to various remote terminals, including one or more information and sales terminals 2, a credit information terminal 3, and data processing terminals 4 of various insurance companies served by the system." Col. 3, lines 5-8: "The central data processing center is suitably also linked to a remote credit information center for checking the credit of a customer in response to a sales order or charging customer's account via debit card." a central data processing center tied to remote insurance company terminals, transaction terminals, motor vehicle service bureaus and credit information and bank terminals for the preparation, verification and forwarding of insurance quotations and policy execution Col. 5, lines 1-12 A video subsystem 6, which operates to provide video presentations to customers. The presentations solicit and allow the customer to enter information at various points via the touch pad 13 displayed on the monitor screen. Such information is transmitted to peripheral subsystem 7, and eventually to the central data processing center 1.

U.S. Pat. No 6,067,525 claim 6	U.S. Pat. No 6,067,525 claim 6 with Court's claim construction	Lockwood U.S. Pat. No. 4,567,359
A system as recited in claim 1, wherein the plurality of subsystems comprises; [sic]	A system as recited in claim 1, wherein the plurality of **[systems that are parts of a larger system]** comprises; [sic]	[Claim 1 chart incorporated by reference]
a time with customer subsystem configured to convert a lead to a buying customer, so as to close a sale; and	a time with customer **[system that is part of a larger system]** configured to convert a lead to a buying customer, so as to close a sale; and	Col. 4, lines 1-6: "The system basically comprises a central data processing center 1 linked to various remote terminals, including one or more information and sales terminals 2, a credit information terminal 3, and data processing terminals 4 of various insurance companies served by the system." Col. 3, lines 5-8: "The central data processing center is suitably also linked to a remote credit information center for checking the credit of a customer in response to a sales order or charging customer's account via debit card." a central data processing center tied to remote insurance company terminals, transaction terminals, motor vehicle service bureaus and credit information and bank terminals for the preparation, verification and forwarding of insurance quotations and policy execution Col. 5, lines 1-12 A video subsystem 6, which operates to provide video presentations to customers. The presentations solicit and allow the customer to enter information at various points via the touch pad 13 displayed on the monitor screen. Such information is transmitted to peripheral

U.S. Pat. No 6,067,525 claim 6	U.S. Pat. No 6,067,525 claim 6 with Court's claim construction	Lockwood U.S. Pat. No. 4,567,359
		subsystem 7, and eventually to the central data processing center 1.
an order management subsystem configured to convert the sale such that a product or service delivered matches a product or service sold.	an order management **[system that is part of a larger system]** configured to convert the sale such that a product or service delivered matches a product or service sold.	Col. 8, lines 35-39. A policy data file (81) is created for all policies issued for each company in that particular day's processing. This file is sent to the appropriate insurance company computer terminal 4 via Telenet® to be input to their automated billing system.

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U.S. Pat. No 6,067,525 claim 7	U.S. Pat. No 6,067,525 claim 7 with Court's claim construction	Lockwood U.S. Pat. No. 4,567,359
A system as recited in claim 1, wherein the plurality of subsystems comprises:	A system as recited in claim 1, wherein the plurality of **[systems that are parts of a larger system]** comprises:	[Claim 1 chart incorporated by reference]
a time with customer subsystem configured to convert a lead to a buying customer, so as to close a sale; and	a time with customer **[system that is part of a larger system]** configured to convert a lead to a buying customer, so as to close a sale; and	Col. 4, lines 1-6: "The system basically comprises a central data processing center 1 linked to various remote terminals, including one or more information and sales terminals 2, a credit information terminal 3, and data processing terminals 4 of various insurance companies served by the system." Col. 3, lines 5-8: "The central data processing center is suitably also linked to a remote credit information center for checking the credit of a customer in response to a sales order or charging customer's account via debit card." a central data processing center tied to remote insurance company terminals, transaction terminals, motor vehicle service bureaus and credit information and bank terminals for the preparation, verification and forwarding of insurance quotations and policy execution Col. 5, lines 1-12 A video subsystem 6, which operates to provide video presentations to customers. The presentations solicit and allow the customer to enter information at various points via the touch pad 13 displayed on the monitor screen. Such information is transmitted to peripheral

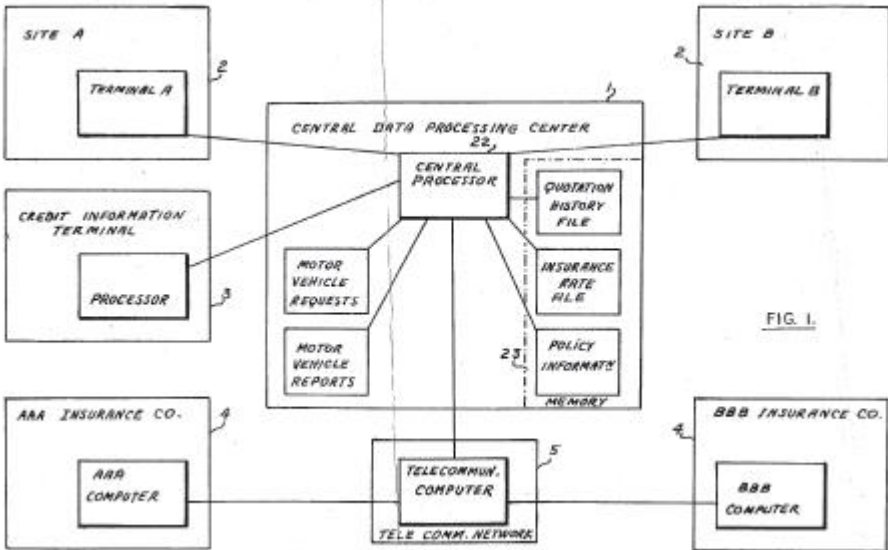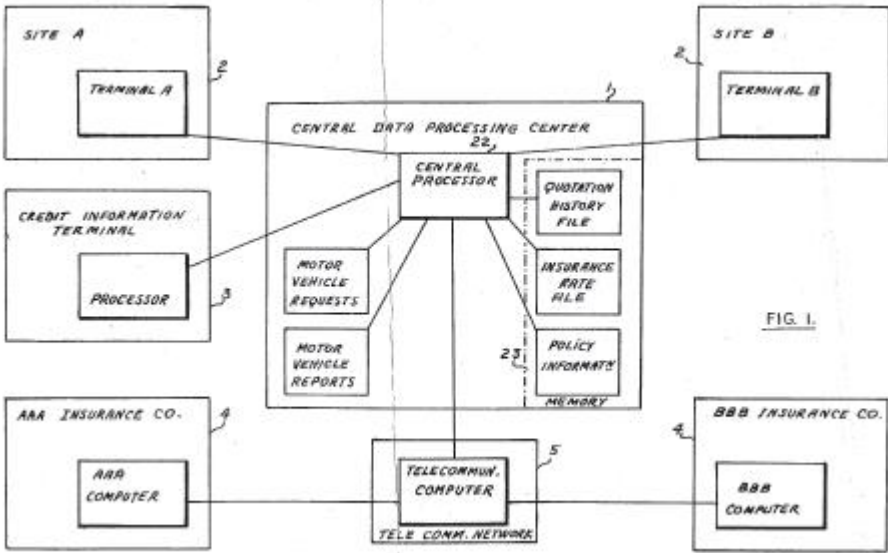| U.S. Pat. No 6,067,525 claim 7	U.S. Pat. No 6,067,525 claim 7 with Court's claim construction	Lockwood U.S. Pat. No. 4,567,359
		subsystem 7, and eventually to the central data processing center 1.
a customer retention subsystem configured to convert an existing customer into a lead, so as to generate repeat sales.	a customer retention **[system that is part of a larger system]** configured to convert an existing customer into a lead, so as to generate repeat sales.	Col. 4, lines 1-6: "The system basically comprises a central data processing center 1 linked to various remote terminals, including one or more information and sales terminals 2, a credit information terminal 3, and data processing terminals 4 of various insurance companies served by the system." Col. 3, lines 5-8: "The central data processing center is suitably also linked to a remote credit information center for checking the credit of a customer in response to a sales order or charging customer's account via debit card." a central data processing center tied to remote insurance company terminals, transaction terminals, motor vehicle service bureaus and credit information and bank terminals for the preparation, verification and forwarding of insurance quotations and policy execution Col. 5, lines 1-12 A video subsystem 6, which operates to provide video presentations to customers. The presentations solicit and allow the customer to enter information at various points via the touch pad 13 displayed on the monitor screen. Such information is transmitted to peripheral subsystem 7, and eventually to the central data processing center 1.

U.S. Pat. No 6,067,525 claim 20	U.S. Pat. No 6,067,525 claim 20 with Court's claim construction	Lockwood U.S. Pat. No. 4,567,359
A method of facilitating a sales process using a computer arrangement having a plurality of subsystems configured to facilitate one or more actions performed during at least one phase of the sales process, the method comprising the steps of:	A method of facilitating a sales process using a computer arrangement having a plurality of **[systems that are part of a larger system]** configured to facilitate one or more actions performed during at least one phase of the sales process, the method comprising the steps of:	The preamble is not a limitation, nonetheless abstract: "A system for automatically dispensing information, goods and services to a customer on a self-service basis including a central data processing center in which information on services offered by various institutions in a particular industry is stored." Col. 3, lines 62-68: "FIG. 1 shows an overview of an automatic system for dispensing insurance quotations and policies according to a preferred embodiment of the invention. It will be understood that such a system can be used in a variety of other service-oriented industries, such as the travel industry,

U.S. Pat. No 6,067,525 claim 20	U.S. Pat. No 6,067,525 claim 20 with Court's claim construction	Lockwood U.S. Pat. No. 4,567,359
		catalogue sales industry, various financial services, and the like." Col. 5, lines 1-12 A video subsystem 6, which operates to provide video presentations to customers. The presentations solicit and allow the customer to enter information at various points via the touch pad 13 displayed on the monitor screen. Such information is transmitted to peripheral subsystem 7, and eventually to the central data processing center 1. Col. 9 lines 13-19: "The system of this invention allows a customer quick and easy access to insurance quotations from several companies, and allows the customer to make a selection and purchase insurance on a self-service basis. All the necessary operations of obtaining information, checking credit, transmitting information to the respective companies and issuing policies, are carried out automatically." Col. 9 lines 32-35: "It will be clear that this system may be applied to many other types of customer service and sales industries. Some examples are the travel industry, many types of financial services, and catalogue sales industries." See col. 5, lines 37-55; Col. 4, lines 1-6: "The system basically comprises a central data processing center 1 linked to various remote terminals, including one or more information and sales terminals 2, a credit information terminal 3, and data processing terminals 4 of various insurance companies served by the system."

U.S. Pat. No 6,067,525 claim 20	U.S. Pat. No 6,067,525 claim 20 with Court's claim construction	Lockwood U.S. Pat. No. 4,567,359
		Col. 3, lines 5-8: "The central data processing center is suitably also linked to a remote credit information center for checking the credit of a customer in response to a sales order or charging customer's account via debit card." a central data processing center tied to remote insurance company terminals, transaction terminals, motor vehicle service bureaus and credit information and bank terminals for the preparation, verification and forwarding of insurance quotations and policy execution
automatically detecting one or more changes in state characteristic of an event occurring in the sales process;	automatically detecting one or more **[changes in a unique configuration of information within the system that is indicative of the occurrence of an event within the system]** occurring in the sales process;	Col. 4, lines 1-7: "The system basically comprises a <u>central data processing center</u> 1 linked to various remote terminals, including one or more information and sales terminals 2, a credit information terminal 3, and data processing terminals 4 of various insurance companies served by the system. <u>The terminals are all linked to the central data processing center by any suitable remote links</u>" Col. 6, lines 51-65: "As seen in FIG. 4, the customer is asked (34) to select the type of insurance quotation desired (e.g. automobile 35, homeowner 36, life 37 or health 38). When the type of insurance is selected, a series of pertinent questions (39) for that type of insurance is asked, such as age, gender, marital status, and so on. The customer enters responses (40) on the touch pad, and the responses are shown on the monitor screen and repeated by the voice synthesizer for customer verification. Each valid answer is stored (41) until all necessary information has been gathered. If at any stage, no answer is received (42) within a predetermined time limit (e.g. about 15 seconds), the program assumes that the customer has left the terminal and returns to the ready state 24 to wait for the next customer."

U.S. Pat. No 6,067,525 claim 20	U.S. Pat. No 6,067,525 claim 20 with Court's claim construction	Lockwood U.S. Pat. No. 4,567,359
		Col. 7, lines 5-10: "Once all the necessary information has been gathered at the terminal (see 44), the processing unit 14 auto-dials the central data processing center 1 (see 45, FIG. 5), sends the gathered information to the center (46) and waits to receive an insurance quotation from each participating company." See col. 7, line 61 – col. 8, line 2: "When the central data processing center receives a quotation request (64) from one of the sales and information terminals 2, it first determines the type of quote requested. The center then locates the appropriate rating information (65) for that type of insurance from the memory, and makes an insurance calculation (66) for each of a series of different insurance companies based on the information received from the customer. A quotation history file stored in the memory is up-dated (67), and the quotation is sent to the terminal (68)."
inferring occurrence of the event and a context in which the event occurred based at least in part on the detected changes in state; and	**[logical process by which the fact that the event has occurred is derived by application of logical rules]** and **[logical process by which the fact that information already existing within the system that becomes relevant upon the occurrence of the event is derived by**	See col. 7, line 61 – col. 8, line 2: "When the central data processing center receives a quotation request (64) from one of the sales and information terminals 2, it first determines the type of quote requested. The center then locates the appropriate rating information (65) for that type of insurance from the memory, and makes an insurance calculation (66) for each of a series of different insurance companies based on the information received from the customer. A quotation history file stored in the memory is up-dated (67), and the quotation is sent to the terminal (68)."

U.S. Pat. No 6,067,525 claim 20	U.S. Pat. No 6,067,525 claim 20 with Court's claim construction	Lockwood U.S. Pat. No. 4,567,359
	application of logical rules] based at least in part on the detected changes in state; and	
automatically initiating an operation in one or more particular subsystems of the computer to facilitate a new action based on the inferred context.	automatically initiating an operation in one or more particular **[systems that are part of a larger system]** of the computer to facilitate a new action based on the inferred context.	See col. 7, line 61 – col. 8, line 2: "When the central data processing center receives a quotation request (64) from one of the sales and information terminals 2, it first determines the type of quote requested. The center then locates the appropriate rating information (65) for that type of insurance from the memory, and makes an insurance calculation (66) for each of a series of different insurance companies based on the information received from the customer. A quotation history file stored in the memory is up-dated (67), and the quotation is sent to the terminal (68)."

U.S. Pat. No 6,067, 525 claim 24	U.S. Pat. No 6,067,525 claim 24 with Court's claim construction	Lockwood U.S. Pat. No. 4,567,359
A method as recited in claim 20,	A method as recited in claim 20,	[Claim 20 chart incorporated by reference]
wherein the inferred context includes information related to at least one phase of the sales process.	wherein the inferred **[information already existing within the system that becomes relevant upon the occurrence of an event]** includes information related to at least one phase of the sales process.	See col. 7, line 61 – col. 8, line 2: "When the central data processing center receives a quotation request (64) from one of the sales and information terminals 2, it first determines the type of quote requested. The center then locates the appropriate rating information (65) for that type of insurance from the memory, and makes an insurance calculation (66) for each of a series of different insurance companies based on the information received from the customer. A quotation history file stored in the memory is up-dated (67), and the quotation is sent to the terminal (68)."

U.S. Pat. No 6,067, 525 claim 34	U.S. Pat. No 6,067,525 claim 34 with Court's claim construction	Lockwood U.S. Pat. No. 4,567,359
A method as recited in claim 20, further comprising the steps of:	A method as recited in claim 20, further comprising the steps of:	[Claim 20 chart incorporated by reference]
inferring occurrence of an event while converting a lead to a buying customer; and	**[logical process by which the fact that the event has occurred is derived by application of logical rules]** while converting a lead to a buying customer; and	See col. 5, lines 37-55; Col. 4, lines 1-6: "The system basically comprises a central data processing center 1 linked to various remote terminals, including one or more information and sales terminals 2, a credit information terminal 3, and data processing terminals 4 of various insurance companies served by the system." Col. 3, lines 5-8: "The central data processing center is suitably also linked to a remote credit information center for checking the credit of a customer in response to a sales order or charging customer's account via debit card." a central data processing center tied to remote insurance company terminals, transaction terminals, motor vehicle service bureaus and credit information and bank terminals for the preparation, verification and forwarding of insurance quotations and policy execution Col. 5, lines 1-12 A video subsystem 6, which operates to provide video presentations to customers. The presentations solicit and allow the customer to enter information at various points via the touch pad 13 displayed on the

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U.S. Pat. No 6,067, 525 claim 34	U.S. Pat. No 6,067,525 claim 34 with Court's claim construction	Lockwood U.S. Pat. No. 4,567,359
		monitor screen. Such information is transmitted to peripheral subsystem 7, and eventually to the central data processing center 1.
using the particular subsystem to convert an existing customer into a lead, so as to generate repeat sales.	using the particular **[system that is part of a larger system]** to convert an existing customer into a lead, so as to generate repeat sales.	See col. 5, lines 37-55; Col. 4, lines 1-6: "The system basically comprises a central data processing center 1 linked to various remote terminals, including one or more information and sales terminals 2, a credit information terminal 3, and data processing terminals 4 of various insurance companies served by the system." Col. 3, lines 5-8: "The central data processing center is suitably also linked to a remote credit information center for checking the credit of a customer in response to a sales order or charging customer's account via debit card." a central data processing center tied to remote insurance company terminals, transaction terminals, motor vehicle service bureaus and credit information and bank terminals for the preparation, verification and forwarding of insurance quotations and policy execution Col. 5, lines 1-12 A video subsystem 6, which operates to provide video presentations to customers. The presentations solicit and allow the customer to enter information at various points via the touch pad 13 displayed on the monitor screen. Such information is transmitted to peripheral subsystem 7, and eventually to the central data processing center 1.

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U.S. Pat. No 6,067, 525 claim 40	U.S. Pat. No 6,067,525 claim 40 with Court's claim construction	Lockwood U.S. Pat. No. 4,567,359
A computer implemented sales system used to facilitate a sales process, the system comprising:	A computer implemented sales system used to facilitate a sales process, the system comprising:	The preamble is not a limitation, nonetheless abstract: "A system for automatically dispensing information, goods and services to a customer on a self-service basis including a central data processing center in which information on services offered by various institutions in a particular industry is stored." Col. 3, lines 62-68: "FIG. 1 shows an overview of an automatic system for dispensing insurance quotations and policies according to a preferred embodiment of the invention. It will be understood that such a system can be used in a variety of other service-oriented industries, such as the travel industry,

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U.S. Pat. No 6,067, 525 claim 40	U.S. Pat. No 6,067,525 claim 40 with Court's claim construction	Lockwood U.S. Pat. No. 4,567,359
		catalogue sales industry, various financial services, and the like." Col. 9 lines 13-19: "The system of this invention allows a customer quick and easy access to insurance quotations from several companies, and allows the customer to make a selection and purchase insurance on a self-service basis. All the necessary operations of obtaining information, checking credit, transmitting information to the respective companies and issuing policies, are carried out automatically." Col. 9 lines 32-35: "It will be clear that this system may be applied to many other types of customer service and sales industries. Some examples are the travel industry, many types of financial services, and catalogue sales industries."

U.S. Pat. No 6,067, 525 claim 40	U.S. Pat. No 6,067,525 claim 40 with Court's claim construction	Lockwood U.S. Pat. No. 4,567,359
a plurality of subsystems configured to electronically facilitate actions performed during the sales process; and	a plurality of [systems that are part of a larger system] configured to electronically facilitate actions performed during the sales process; and	 See col. 5, lines 37-55; Col. 4, lines 1-6: "The system basically comprises a central data processing center 1 linked to various remote terminals, including one or more information and sales terminals 2, a credit information terminal 3, and data processing terminals 4 of various insurance companies served by the system." Col. 3, lines 5-8: "The central data processing center is suitably also linked to a remote credit information center for checking the credit of a customer in response to a sales order or charging customer's account via debit card." a central data processing center tied to remote insurance company

FIG. 1.

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U.S. Pat. No 6,067, 525 claim 40	U.S. Pat. No 6,067,525 claim 40 with Court's claim construction	Lockwood U.S. Pat. No. 4,567,359
		terminals, transaction terminals, motor vehicle service bureaus and credit information and bank terminals for the preparation, verification and forwarding of insurance quotations and policy execution Col. 5, lines 1-12 A video subsystem 6, which operates to provide video presentations to customers. The presentations solicit and allow the customer to enter information at various points via the touch pad 13 displayed on the monitor screen. Such information is transmitted to peripheral subsystem 7, and eventually to the central data processing center 1.
an event manager coupled to the subsystems and configured to detect one or more changes in state characteristic of an event occurring in the system,	**[hardware and/or software]** coupled to the **[systems that are part of a larger system]** and configured to detect one or more **[a change in a unique configuration of information within the system that is indicative of the occurrence of an event within the system** occurring in the system,	Col. 4, lines 1-7: "The system basically comprises a <u>central data processing center</u> 1 linked to various remote terminals, including one or more information and sales terminals 2, a credit information terminal 3, and data processing terminals 4 of various insurance companies served by the system. <u>The terminals are all linked to the central data processing center by any suitable remote links</u>" Col. 6, lines 51-65: "As seen in FIG. 4, the customer is asked (34) to select the type of insurance quotation desired (e.g. automobile 35, homeowner 36, life 37 or health 38). When the type of insurance is selected, a series of pertinent questions (39) for that type of insurance is asked, such as age, gender, marital status, and so on. The customer enters responses (40) on the touch pad, and the responses are shown on the monitor screen and repeated by the voice synthesizer for customer verification. Each valid answer is stored (41) until all necessary information has been gathered. If at any stage, no answer is received (42) within a predetermined time limit (e.g. about 15 seconds), the program assumes that the customer has left the terminal and returns to the ready state 24 to wait for the next customer."

U.S. Pat. No 6,067, 525 claim 40	U.S. Pat. No 6,067,525 claim 40 with Court's claim construction	Lockwood U.S. Pat. No. 4,567,359
		Col. 7, lines 5-10: "Once all the necessary information has been gathered at the terminal (see 44), the processing unit 14 auto-dials the central data processing center 1 (see 45, FIG. 5), sends the gathered information to the center (46) and waits to receive an insurance quotation from each participating company." See col. 7, line 61 – col. 8, line 2: "When the central data processing center receives a quotation request (64) from one of the sales and information terminals 2, it first determines the type of quote requested. The center then locates the appropriate rating information (65) for that type of insurance from the memory, and makes an insurance calculation (66) for each of a series of different insurance companies based on the information received from the customer. A quotation history file stored in the memory is up-dated (67), and the quotation is sent to the terminal (68)."
infer occurrence of the event and a context in which the event occurred based at least in part on the detected changes in state,	[logical process by which the fact that the event has occurred is derived by application of logical rules] and [logical process by which the fact that information already existing within the system that becomes relevant upon the occurrence of the event is derived by	See col. 7, line 61 – col. 8, line 2: "When the central data processing center receives a quotation request (64) from one of the sales and information terminals 2, it first determines the type of quote requested. The center then locates the appropriate rating information (65) for that type of insurance from the memory, and makes an insurance calculation (66) for each of a series of different insurance companies based on the information received from the customer. A quotation history file stored in the memory is up-dated (67), and the quotation is sent to the terminal (68)."

U.S. Pat. No 6,067, 525 claim 40	U.S. Pat. No 6,067,525 claim 40 with Court's claim construction	Lockwood U.S. Pat. No. 4,567,359
	application of logical rules] based at least in part on the detected changes in state; and	
link the inferred event with an action to be performed during the sales process based on prior sales experience using the sales system, and	link the inferred event with an action to be performed during the sales process based on prior sales experience using the sales system, and	See col. 7, line 61 – col. 8, line 2: "When the central data processing center receives a quotation request (64) from one of the sales and information terminals 2, it first determines the type of quote requested. The center then locates the appropriate rating information (65) for that type of insurance from the memory, and makes an insurance calculation (66) for each of a series of different insurance companies based on the information received from the customer. A quotation history file stored in the memory is up-dated (67), and the quotation is sent to the terminal (68)."
automatically initiate an operation using one or more of the plurality of subsystems to facilitate the action to be performed based on the inferred context.	automatically initiating an operation using one or more of the plurality of **[systems that are part of a larger system]** to facilitate the action to be performed based on the inferred context.	See col. 7, line 61 – col. 8, line 2: "When the central data processing center receives a quotation request (64) from one of the sales and information terminals 2, it first determines the type of quote requested. The center then locates the appropriate rating information (65) for that type of insurance from the memory, and makes an insurance calculation (66) for each of a series of different insurance companies based on the information received from the customer. A quotation history file stored in the memory is up-dated (67), and the quotation is sent to the terminal (68)."

Deaton U.S. Pat. No. 5,201,010 anticipates asserted Claims 1-3, 5-8, 10, 12, 20, 24, 34, 35, 37 and 40

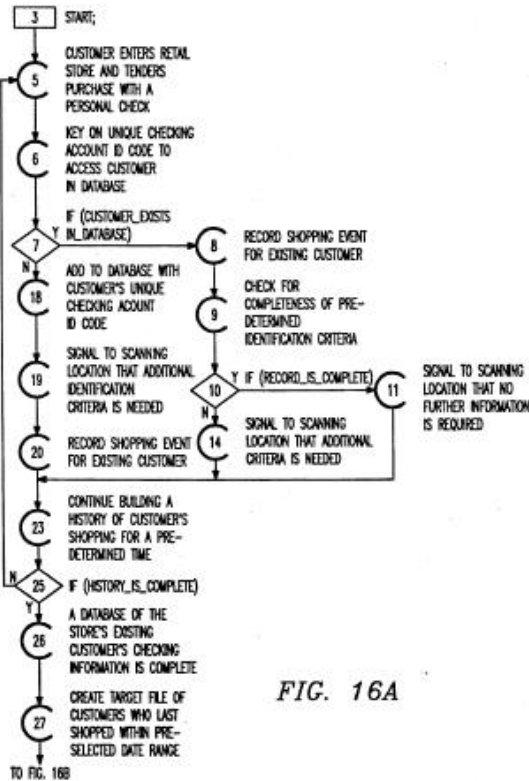| U.S. Pat. No 6,067,525 claim 1	U.S. Pat. No 6,067,525 claim 1 with Court's claim construction	Deaton U.S. Pat. No. 5,201,010
A computer implemented sales system used to facilitate a sales process, the system comprising:	A computer implemented sales system used to facilitate a sales process, the system comprising:	The preamble is not a limitation, nonetheless abstract: "A method and system is disclosed for performing targeted marking on infrequent shoppers." Col. 3 lines 50-60: "Important aspects of the present invention are to facilitate check transactions by reducing the requirements for customer identification, to enable a store to adopt a risk management approach to check verification based on a customer's transactional history (frequency and dollar volume over specified intervals), and to improve a store's marketing and other customer relations programs by collecting transactional data for that store, both current and historical, that can be used to identify new or infrequent customers, develop customer profiles and to perform targeted marketing." Col. 9, lines 9-14: "A transaction terminal transmits a request (including a function code identifying the requested function together with other request data) to the transaction processor, which processes the request and returns an appropriate response."
a plurality of subsystems configured to facilitate one or more actions performed	a plurality of [systems that are part of a larger system] configured to	Col. 4 lines 12-19: "The system includes one or more transaction terminals, coupled to a transaction processor that stores the customer database. A transaction

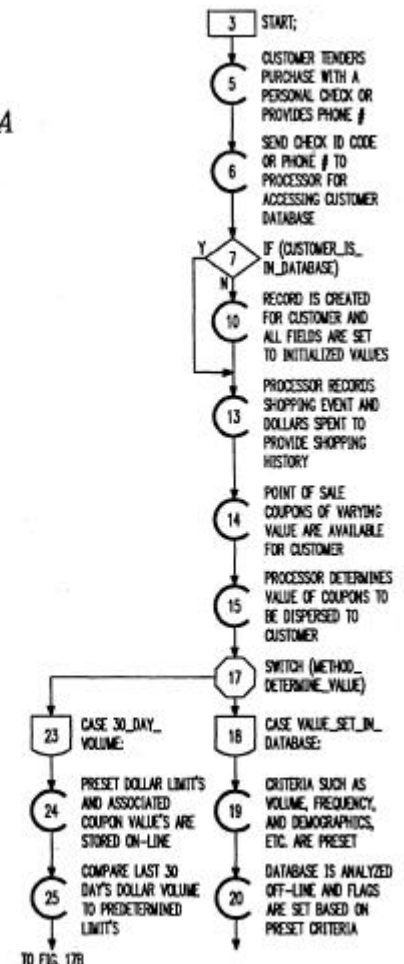| U.S. Pat. No 6,067,525 claim 1	U.S. Pat. No 6,067,525 claim 1 with Court's claim construction	Deaton U.S. Pat. No. 5,201,010
during at least <u>one phase of the sales process</u>; and	facilitate one or more actions performed during at least one phase of the sales process; and	terminal is used to <u>transmit a customer information request</u> (such as for check transaction verification), which includes an automatically read customer's check identification number, from the point of sale (POS) to the transaction processor."
an <u>event manager, coupled to the subsystems</u>, the event manager <u>detecting</u> one or more changes in <u>state characteristic of an event</u> occurring within the system	**[hardware and/or software]**, coupled to the **[systems that are part of a larger system]**, the **[hardware and/or software]** detecting one or more **[changes in a unique configuration of information within the system that is indicative of the occurrence of an event within the system]** occurring within the system,	Col. 4 lines 12-28: "The system includes one or more <u>transaction terminals, coupled to a transaction processor</u> that stores the customer database. A transaction terminal is used to transmit a customer information request (such as for check transaction verification), which includes an <u>automatically read customer's check identification number</u>, from the point of sale (POS) to the transaction processor. The transaction processor processes the customer information request, using the check identification number to search the customer database and retrieve the corresponding customer record, if any. Based on the customer information in the customer record, or the lack of a customer record, the transaction processor returns an appropriate response (such as check verification status) and marketing response information to the transaction terminal." Col. 9 lines 15-21: "For example, in the case of check verification, a transaction terminal is used to transmit a verification request-the customer's check ID, the verification function code, and the dollar amount. The transaction processor processes the request, updates the customer database to reflect that transaction, and returns a customer verification status response." Col. 31 lines 52-56: "Event-driven activities are performed automatically by the check

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U.S. Pat. No 6,067,525 claim 1	U.S. Pat. No 6,067,525 claim 1 with Court's claim construction	Deaton U.S. Pat. No. 5,201,010
		transaction processing system to implement certain functions without operator intervention. The configuration and timing of these activities is a matter of routine design selection."
inferring occurrence of the <u>event</u> and a <u>context</u> in which the event occurred based at least in part on the detected changes in state, and	**[logical process by which the fact that the event has occurred is derived by application of logical rules]** and **[logical process by which the fact that information already existing within the system that becomes relevant upon the occurrence of the event is derived by application of logical rules]** based at least in part on the detected changes in state, and	Col. 5, lines 19-27: "Moreover, because the check transactional data is generated and maintained locally, it provides <u>significant information about the store's customers</u> over and above the information necessary for check verification risk management. New customers are readily identified, and frequency and dollar volume information may be used to <u>establish customer profiles</u> and to target advertising, marketing and promotional programs, and for other customer relations purposes." Col. 6, lines 10-24: "In addition to check verification status, the system collects and accumulates selected <u>additional transactional data, including frequency and dollar amounts over specified intervals</u> (such as Day/Week/Month/Quarter/Total) and <u>other historical information</u> such as departments shopped, products purchased and the like, thus allowing the store to adopt risk management approach to check verification tailored to the store's particular customer and financial situation by conditioning check authorization on meeting certain selected transactional limits regardless of customer status (the CALL MANAGER response), and allowing the store to develop <u>customer profiles</u> and to target advertising, marketing and promotions, and otherwise improve customer relations." Col. 65 line 59 – Col. 66 line 12: "The checking account identification number is entered into processor 110 which contain a database that maintains customer records including

U.S. Pat. No 6,067,525 claim 1	U.S. Pat. No 6,067,525 claim 1 with Court's claim construction	Deaton U.S. Pat. No. 5,201,010
		the customer's name and address, the checking account identification number, and customer shopping habits and transactional data over a preselected time interval. The checking account identification number is compared with the database. A response is generated by the processor 110 to signal the presence of the customer's checking account identification number or the failure to locate the customer's checking account identification number. A new record is then created in the database for that customer's checking account identification number in response to a processor 110 response indicating the failure to locate, so that the customer's name and address is entered into the record along with a shopping incidence and shopping data being recorded in the database concurrently. A list of customers is then generated in the database whose last transaction date is prior to a preselected interval of inactivity so that grouping or subgrouping of customers is available for marketing efforts." Col. 66 lines 13-19: "Alternatively, the system may use dollar amounts to determine an "infrequent shopper". If the system determines that the cumulative dollars spent at the store by a specified customer is equal to or less than a predetermined dollar level within a predetermined time interval, the specified customer is designated as an "infrequent shopper"." Col. 66 lines 20-30: "As another alternative, the database is maintained with the shopping history for each unique check identification. Each time the system detects a check with a unique check identification number, it is checked against the database. If the last date shopped is prior to a preselected date, a signal is generated and transmitted to the POS. The check is then marked or set aside to be used to create a mailing list. Alternatively, the signal may be used to prompt the store clerk to disburse incentive coupons at

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U.S. Pat. No 6,067,525 claim 1	U.S. Pat. No 6,067,525 claim 1 with Court's claim construction	Deaton U.S. Pat. No. 5,201,010
		the POS." Col. 66, lines 32-38: "5.4. Marketing Based On Range Of Last Shopping Dates As noted above, it would be advantageous to be able to selectively market to infrequent shoppers. FIG. 15 illustrated a database building technique to obtain a list of infrequent shoppers based upon their last shopping date.

U.S. Pat. No 6,067,525 claim 1	U.S. Pat. No 6,067,525 claim 1 with Court's claim construction	Deaton U.S. Pat. No. 5,201,010
		FIG. 15A

U.S. Pat. No 6,067,525 claim 1	U.S. Pat. No 6,067,525 claim 1 with Court's claim construction	Deaton U.S. Pat. No. 5,201,010
		FIG. 15B Col. 66, lines 32-38: FIG. 16 illustrates a database building technique to provide a list of a store's customers whose last shopping date falls within a preselected

U.S. Pat. No 6,067,525 claim 1	U.S. Pat. No 6,067,525 claim 1 with Court's claim construction	Deaton U.S. Pat. No. 5,201,010
		shopping date range. … In accordance with the techniques shown in FIG. 16, a customer's checking account identification number is entered as a unique customer identification code by the check reader 119. Host processor 110 is programmed to store a database which includes a plurality of unique customer identification codes and check cashing history of prior customers of the retail establishment, including date of check transactions. The processor then compares each newly entered unique customer identification code against the stored database. A signal is generated to indicate the presence of a complete customer information record or of an incomplete customer information record as a result of the comparison. A second database is then generated which lists customers whose last unique customer identification code entry date falls within a preselected date range. A promotion may then be selectively offered by the retail establishment to customers within the second database. For example, coupons or other enticements may be mailed directly to the customers on the second database, or distributed at the POS."

U.S. Pat. No 6,067,525 claim 1	U.S. Pat. No 6,067,525 claim 1 with Court's claim construction	Deaton U.S. Pat. No. 5,201,010

FIG. 16A

U.S. Pat. No 6,067,525 claim 1	U.S. Pat. No 6,067,525 claim 1 with Court's claim construction	Deaton U.S. Pat. No. 5,201,010
		FROM FIG. 16A 33 READ FIRST RECORD IN DATABASE OF CUSTOMER'S CHECKING ACCOUNT INFORMATION 36 LOCATE LAST TRANSACTION DATE IN CUSTOMER'S SHOPPING HISTORY 37 COMPARE LAST TRANSACTION DATE WITH PRE-SELECTED TARGET DATE RANGE Y 39 IF (DATE_WITHIN_TARGET_RANGE) N 43 WRITE RECORD FROM STORE'S DATABASE OF CUSTOMERS TO TARGET FILE 46 READ NEXT RECORD FROM STORE'S DATABASE OF CUSTOMERS N 48 IF (END_OF_FILE) Y 49 TARGET FILE CONTAINS CUSTOMERS WHO LAST SHOPPED WITHIN SAID DATE RANGE 54 MARKETING MAY NOW BE TARGETED AT CUSTOMER'S LAST SHOPPING WITHIN DATE RANGE 54 (FUNCTION RETURN) FIG. 16B
automatically initiating an operation in one or more particular subsystems of the computer to facilitate a new action based on the inferred	automatically initiating an operation in one or more particular [systems that are part of a larger system] of the computer to	Col. 52 lines 31-39: "At the appropriate event time, the Event Manager Task spawns the event subtask, which receives (822) the current record from the Event Table. The current event record includes a current event time and an activity pointer to each of up to 10 associated activities identified in the Activity

U.S. Pat. No 6,067,525 claim 1	U.S. Pat. No 6,067,525 claim 1 with Court's claim construction	Deaton U.S. Pat. No. 5,201,010
context.	facilitate a new action based on the inferred context.	Table. The event subtask sequentially executes each activity associated with the current event time." Col. 52 lines 66-68: "For each activity code read from the Activity Table, the event subtask dispatches (830) to a corresponding activity routine for execution." Col. 67 line 59 – Col. 68 line 12. FIG. 17 illustrates a program flow chart of a marketing technique utilizing the present invention, wherein coupons may be distributed to customers based upon the frequency of shopping, dollar volume or' other criteria based upon the shopping habits of the customer. … The technique shown in FIG. 17 enables the stores to issue coupons and other inducements to customers based upon the shopping habits of the customer. For example, the technique shown in FIG. 17 enables the store to reward a high volume shopper in order to hold on to especially good shoppers. Alternatively, the store can award a lesser incentive package to good shoppers in order to maintain a consistency such that each shopper receives a coupon package. Importantly, the technique enables a high incentive coupon pack to be delivered to a customer who is a secondary shopper or who is an infrequent shopper, in order to make them a primary shopper. Col. 70 lines 13-16. A … technique of distributing coupons utilizes a system to actually print, at the point of sale, coupons bearing the desired information based upon selected criteria. Col. 70 lines 30-34. [C]oupon dispensing apparatus … may be utilized to print the coupons as

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U.S. Pat. No 6,067,525 claim 1	U.S. Pat. No 6,067,525 claim 1 with Court's claim construction	Deaton U.S. Pat. No. 5,201,010
		described in FIG. 16A-B, … based upon the criteria and the operation of the present invention.

FIG. 17A

U.S. Pat. No 6,067,525 claim 1	U.S. Pat. No 6,067,525 claim 1 with Court's claim construction	Deaton U.S. Pat. No. 5,201,010
		FIG. 17B Col. 70 line 50 – Col. 71 line 21. FIG. 18A-C illustrates a technique for generating coupons based upon the particular transaction currently being accomplished by the customer. The technique of FIG. 18 detects the particular store departments in which the products being purchased are located. … For example, the technique shown in FIG. III detects whether or not items have been purchased from the meat department, dairy department or deli. Based upon data stored within the computer, the decision is then made as to whether to award a

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U.S. Pat. No 6,067,525 claim 1	U.S. Pat. No 6,067,525 claim 1 with Court's claim construction	Deaton U.S. Pat. No. 5,201,010
		coupon and what type of coupon to award. For example, if the data illustrates that over a period of time a shopper shows a consistent failure to shop at the delicatessen, then when the customer's check identification is scanned into the check reader 119, the processor 110 pulls up the customer's history and generates a coupon to induce the customer to shop at the delicatessen the next time the customer shops. This inducing can be done by providing the customer with a very high value coupon used only for deli shopping. Similarly, the stored data in processor 110 may contain information regarding particular product groups. If it is determined that the customer is a frequent shopper but does not purchase coffee, the data may determine that a coupon providing a large discount on coffee would be suitable to give to the customer. Alternatively, the system might determine that the customer had no history of buying a specific brand of coffee, and incentive coupons can be distributed for that brand of coffee. To provide this information, information regarding the particular product and the department of the product is generated by the bar code reader 1130, or through entry through the cash register, and transmitted to the host processor 110. The host processor 110 then identifies each particular product being purchased, compares it against the stored data tables and generates an indication of the type of coupon to be given to the customer.

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U.S. Pat. No 6,067,525 claim 1	U.S. Pat. No 6,067,525 claim 1 with Court's claim construction	Deaton U.S. Pat. No. 5,201,010
		FIG. 18A

U.S. Pat. No 6,067,525 claim 1	U.S. Pat. No 6,067,525 claim 1 with Court's claim construction	Deaton U.S. Pat. No. 5,201,010

U.S. Pat. No 6,067,525 claim 1	U.S. Pat. No 6,067,525 claim 1 with Court's claim construction	Deaton U.S. Pat. No. 5,201,010

U.S. Pat. No 6,067,525 claim 2	U.S. Pat. No 6,067,525 claim 2 with Court's claim construction	Deaton U.S. Pat. No. 5,201,010
A system as recited in claim 1,	A system as recited in claim 1,	[Claim 1 chart incorporated by reference]
wherein the inferred context includes information related to at least one phase of the sales process.	wherein the inferred **[information already existing within the system that becomes relevant upon the occurrence of an event]** includes information related to at least one phase of the sales process.	Col. 5, lines 19-27: "Moreover, because the check transactional data is generated and maintained locally, it provides <u>significant information about the store's customers</u> over and above the information necessary for check verification risk management. New customers are readily identified, and frequency and dollar volume information may be used to <u>establish customer profiles</u> and to target advertising, marketing and promotional programs, and for other customer relations purposes." Col. 6, lines 10-24: "In addition to check verification status, the system collects and accumulates selected <u>additional transactional data, including frequency and dollar amounts over specified intervals</u> (such as Day/Week/Month/Quarter/Total) and <u>other historical information</u> such as departments shopped, products purchased and the like, thus allowing the store to adopt risk management approach to check verification tailored to the store's particular customer and financial situation by conditioning check authorization on meeting certain selected transactional limits regardless of customer status (the CALL MANAGER response), and allowing the store to develop <u>customer profiles</u> and to target advertising, marketing and promotions, and otherwise improve customer relations." Col. 65 line 59 – Col. 66 line 12: "The checking account identification number is entered into processor 110 which contain a database that maintains customer records including the customer's name and address, the checking account identification

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U.S. Pat. No 6,067,525 claim 2	U.S. Pat. No 6,067,525 claim 2 with Court's claim construction	Deaton U.S. Pat. No. 5,201,010
		number, and customer shopping habits and transactional data over a preselected time interval. The checking account identification number is compared with the database. A response is generated by the processor 110 to signal the presence of the customer's checking account identification number or the failure to locate the customer's checking account identification number. … A list of customers is then generated in the database whose last transaction date is prior to a preselected interval of inactivity so that grouping or subgrouping of customers is available for marketing efforts."

U.S. Pat. No 6,067,525 claim 3	U.S. Pat. No 6,067,525 claim 3 with Court's claim construction	Deaton U.S. Pat. No. 5,201,010
A system as recited in claim 1,	A system as recited in claim 1,	[Claim 1 chart incorporated by reference]
wherein the inferred context includes information related to whether a previous event has occurred in the sales process.	wherein the inferred **[information already existing within the system that becomes relevant upon the occurrence of an event]** includes information related to whether a previous event has occurred in the sales process.	Col. 5, lines 19-27: "Moreover, because the check transactional data is generated and maintained locally, it provides significant information about the store's customers over and above the information necessary for check verification risk management. New customers are readily identified, and frequency and dollar volume information may be used to establish customer profiles and to target advertising, marketing and promotional programs, and for other customer relations purposes." Col. 6, lines 10-24: "In addition to check verification status, the system collects and accumulates selected additional transactional data, including frequency and dollar amounts over specified intervals (such as Day/Week/Month/Quarter/Total) and other historical information such as departments shopped, products purchased and the like, thus allowing the store to adopt risk management approach to check verification tailored to the store's particular customer and financial situation by conditioning check authorization on meeting certain selected transactional limits regardless of customer status (the CALL MANAGER response), and allowing the store to develop customer profiles and to target advertising, marketing and promotions, and otherwise improve customer relations." Col. 65 line 59 – Col. 66 line 12: "The checking account identification number is entered into processor 110 which contain a database that maintains customer records including the customer's name and address, the checking account identification

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U.S. Pat. No 6,067,525 claim 3	U.S. Pat. No 6,067,525 claim 3 with Court's claim construction	Deaton U.S. Pat. No. 5,201,010
		number, and customer shopping habits and transactional data over a preselected time interval. The checking account identification number is compared with the database. A response is generated by the processor 110 to signal the presence of the customer's checking account identification number or the failure to locate the customer's checking account identification number. … A list of customers is then generated in the database whose last transaction date is prior to a preselected interval of inactivity so that grouping or subgrouping of customers is available for marketing efforts."

U.S. Pat. No 6,067,525 claim 5	U.S. Pat. No 6,067,525 claim 5 with Court's claim construction	Deaton U.S. Pat. No. 5,201,010
A system as recited in claim 1, wherein the plurality of subsystems comprises:	A system as recited in claim 1, wherein the plurality of **[systems that are parts of a larger system]** comprises:	[Claim 1 chart incorporated by reference]
a time with customer subsystem configured to convert a lead to a buying customer, so as to close a sale; and	a time with customer **[system that is part of a larger system]** configured to convert a lead to a buying customer, so as to close a sale; and	Col. 4 lines 12-19: "The system includes one or more <u>transaction terminals</u>, coupled to a transaction processor that stores the customer database. A transaction terminal is used to <u>transmit a customer information request</u> (such as for check transaction verification), which includes an automatically read customer's check identification number, from the point of sale (POS) to the transaction processor." Col. 67 line 59 – Col. 68 line 12. FIG. 17 illustrates a program flow chart of a marketing technique utilizing the present invention, wherein coupons may be distributed to customers based upon the frequency of shopping, dollar volume or' other criteria based upon the shopping habits of the customer. … The technique shown in FIG. 17 enables the stores to issue coupons and other inducements to customers based upon the shopping habits of the customer. For example, the technique shown in FIG. 17 enables the store to reward a high volume shopper in order to hold on to especially good shoppers. Alternatively, the store can award a lesser incentive package to good shoppers in order to maintain a consistency such that each shopper receives a coupon package. Importantly, the technique enables a high incentive coupon pack to be delivered to a customer who is a secondary shopper or who is an infrequent shopper, in order to make them a primary shopper.

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U.S. Pat. No 6,067,525 claim 5	U.S. Pat. No 6,067,525 claim 5 with Court's claim construction	Deaton U.S. Pat. No. 5,201,010
		Col. 70 line 50 – Col. 71 line 21. FIG. 18A-C illustrates a technique for generating coupons based upon the particular transaction currently being accomplished by the customer. The technique of FIG. 18 detects the particular store departments in which the products being purchased are located. … For example, the technique shown in FIG. III detects whether or not items have been purchased from the meat department, dairy department or deli. Based upon data stored within the computer, the decision is then made as to whether to award a coupon and what type of coupon to award. For example, if the data illustrates that over a period of time a shopper shows a consistent failure to shop at the delicatessen, then when the customer's check identification is scanned into the check reader 119, the processor 110 pulls up the customer's history and generates a coupon to induce the customer to shop at the delicatessen the next time the customer shops. This inducing can be done by providing the customer with a very high value coupon used only for deli shopping. Similarly, the stored data in processor 110 may contain information regarding particular product groups. If it is determined that the customer is a frequent shopper but does not purchase coffee, the data may determine that a coupon providing a large discount on coffee would be suitable to give to the customer. Alternatively, the system might determine that the customer had no history of buying a specific brand of coffee, and incentive coupons can be distributed for that brand of coffee.
a lead generation subsystem configured to convert a name to a potential customer.	a lead generation **[system that is a part of a larger system]** configured to convert a name to a potential	Col. 4 lines 12-19: "The system includes one or more <u>transaction terminals</u>, coupled to a transaction processor that stores the customer database. A transaction terminal is used to <u>transmit a customer information request</u> (such as for

U.S. Pat. No 6,067,525 claim 5	U.S. Pat. No 6,067,525 claim 5 with Court's claim construction	Deaton U.S. Pat. No. 5,201,010
	customer.	check transaction verification), which includes an automatically read customer's check identification number, from the point of sale (POS) to the transaction processor." Col. 67 line 59 – Col. 68 line 12. FIG. 17 illustrates a program flow chart of a marketing technique utilizing the present invention, wherein coupons may be distributed to customers based upon the frequency of shopping, dollar volume or' other criteria based upon the shopping habits of the customer. … The technique shown in FIG. 17 enables the stores to issue coupons and other inducements to customers based upon the shopping habits of the customer. For example, the technique shown in FIG. 17 enables the store to reward a high volume shopper in order to hold on to especially good shoppers. Alternatively, the store can award a lesser incentive package to good shoppers in order to maintain a consistency such that each shopper receives a coupon package. Importantly, the technique enables a high incentive coupon pack to be delivered to a customer who is a secondary shopper or who is an infrequent shopper, in order to make them a primary shopper. Col. 70 line 50 – Col. 71 line 21. FIG. 18A-C illustrates a technique for generating coupons based upon the particular transaction currently being accomplished by the customer. The technique of FIG. 18 detects the particular store departments in which the products being purchased are located. … For example, the technique shown in FIG. III detects whether or not items have been purchased from the meat department, dairy department or deli. Based upon data stored within the computer, the decision is then made as to whether to award a coupon and what type of coupon to award. For example, if the data illustrates that over a period of time a

U.S. Pat. No 6,067,525 claim 5	U.S. Pat. No 6,067,525 claim 5 with Court's claim construction	Deaton U.S. Pat. No. 5,201,010
		shopper shows a consistent failure to shop at the delicatessen, then when the customer's check identification is scanned into the check reader 119, the processor 110 pulls up the customer's history and generates a coupon to induce the customer to shop at the delicatessen the next time the customer shops. This inducing can be done by providing the customer with a very high value coupon used only for deli shopping. Similarly, the stored data in processor 110 may contain information regarding particular product groups. If it is determined that the customer is a frequent shopper but does not purchase coffee, the data may determine that a coupon providing a large discount on coffee would be suitable to give to the customer. Alternatively, the system might determine that the customer had no history of buying a specific brand of coffee, and incentive coupons can be distributed for that brand of coffee.

U.S. Pat. No 6,067,525 claim 6	U.S. Pat. No 6,067,525 claim 6 with Court's claim construction	Deaton U.S. Pat. No. 5,201,010
A system as recited in claim 1, wherein the plurality of subsystems comprises; [sic]	A system as recited in claim 1, wherein the plurality of **[systems that are parts of a larger system]** comprises; [sic]	[Claim 1 chart incorporated by reference]
a time with customer subsystem configured to convert a lead to a buying customer, so as to close a sale; and	a time with customer **[system that is part of a larger system]** configured to convert a lead to a buying customer, so as to close a sale; and	Col. 4 lines 12-19: "The system includes one or more <u>transaction terminals</u>, coupled to a transaction processor that stores the customer database. A transaction terminal is used to <u>transmit a customer information request</u> (such as for check transaction verification), which includes an automatically read customer's check identification number, from the point of sale (POS) to the transaction processor." Col. 67 line 59 – Col. 68 line 12. FIG. 17 illustrates a program flow chart of a marketing technique utilizing the present invention, wherein coupons may be distributed to customers based upon the frequency of shopping, dollar volume or' other criteria based upon the shopping habits of the customer. … The technique shown in FIG. 17 enables the stores to issue coupons and other inducements to customers based upon the shopping habits of the customer. For example, the technique shown in FIG. 17 enables the store to reward a high volume shopper in order to hold on to especially good shoppers. Alternatively, the store can award a lesser incentive package to good shoppers in order to maintain a consistency such that each shopper receives a coupon package. Importantly, the technique enables a high incentive coupon pack to be delivered to a customer who is a secondary shopper or who is an infrequent shopper, in order to make them a primary shopper.

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U.S. Pat. No 6,067,525 claim 6	U.S. Pat. No 6,067,525 claim 6 with Court's claim construction	Deaton U.S. Pat. No. 5,201,010
		Col. 70 line 50 – Col. 71 line 21. FIG. 18A-C illustrates a technique for generating coupons based upon the particular transaction currently being accomplished by the customer. The technique of FIG. 18 detects the particular store departments in which the products being purchased are located. … For example, the technique shown in FIG. III detects whether or not items have been purchased from the meat department, dairy department or deli. Based upon data stored within the computer, the decision is then made as to whether to award a coupon and what type of coupon to award. For example, if the data illustrates that over a period of time a shopper shows a consistent failure to shop at the delicatessen, then when the customer's check identification is scanned into the check reader 119, the processor 110 pulls up the customer's history and generates a coupon to induce the customer to shop at the delicatessen the next time the customer shops. This inducing can be done by providing the customer with a very high value coupon used only for deli shopping. Similarly, the stored data in processor 110 may contain information regarding particular product groups. If it is determined that the customer is a frequent shopper but does not purchase coffee, the data may determine that a coupon providing a large discount on coffee would be suitable to give to the customer. Alternatively, the system might determine that the customer had no history of buying a specific brand of coffee, and incentive coupons can be distributed for that brand of coffee.
an order management subsystem configured to convert the sale such that a	an order management **[system that is part of a larger system]** configured to	Col. 4 lines 12-19: "The system includes one or more <u>transaction terminals</u>, coupled to a transaction processor that stores the customer database. A transaction

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U.S. Pat. No 6,067,525 claim 6	U.S. Pat. No 6,067,525 claim 6 with Court's claim construction	Deaton U.S. Pat. No. 5,201,010
product or service delivered matches a product or service sold.	convert the sale such that a product or service delivered matches a product or service sold.	terminal is used to <u>transmit a customer information request</u> (such as for check transaction verification), which includes an automatically read customer's check identification number, from the point of sale (POS) to the transaction processor." Col. 67 line 59 – Col. 68 line 12. FIG. 17 illustrates a program flow chart of a marketing technique utilizing the present invention, wherein coupons may be distributed to customers based upon the frequency of shopping, dollar volume or' other criteria based upon the shopping habits of the customer. … The technique shown in FIG. 17 enables the stores to issue coupons and other inducements to customers based upon the shopping habits of the customer. For example, the technique shown in FIG. 17 enables the store to reward a high volume shopper in order to hold on to especially good shoppers. Alternatively, the store can award a lesser incentive package to good shoppers in order to maintain a consistency such that each shopper receives a coupon package. Importantly, the technique enables a high incentive coupon pack to be delivered to a customer who is a secondary shopper or who is an infrequent shopper, in order to make them a primary shopper. Col. 70 line 50 – Col. 71 line 21. FIG. 18A-C illustrates a technique for generating coupons based upon the particular transaction currently being accomplished by the customer. The technique of FIG. 18 detects the particular store departments in which the products being purchased are located. … For example, the technique shown in FIG. III detects whether or not items have been purchased from the meat department, dairy department or deli. Based upon data stored within the computer, the decision is then made as to whether to award a coupon and what type of coupon to

U.S. Pat. No 6,067,525 claim 6	U.S. Pat. No 6,067,525 claim 6 with Court's claim construction	Deaton U.S. Pat. No. 5,201,010
		award. For example, if the data illustrates that over a period of time a shopper shows a consistent failure to shop at the delicatessen, then when the customer's check identification is scanned into the check reader 119, the processor 110 pulls up the customer's history and generates a coupon to induce the customer to shop at the delicatessen the next time the customer shops. This inducing can be done by providing the customer with a very high value coupon used only for deli shopping. Similarly, the stored data in processor 110 may contain information regarding particular product groups. If it is determined that the customer is a frequent shopper but does not purchase coffee, the data may determine that a coupon providing a large discount on coffee would be suitable to give to the customer. Alternatively, the system might determine that the customer had no history of buying a specific brand of coffee, and incentive coupons can be distributed for that brand of coffee.

U.S. Pat. No 6,067,525 claim 7	U.S. Pat. No 6,067,525 claim 7 with Court's claim construction	Deaton U.S. Pat. No. 5,201,010
A system as recited in claim 1, wherein the plurality of subsystems comprises:	A system as recited in claim 1, wherein the plurality of **[systems that are parts of a larger system]** comprises:	[Claim 1 chart incorporated by reference]
a time with customer subsystem configured to convert a lead to a buying customer, so as to close a sale; and	a time with customer **[system that is part of a larger system]** configured to convert a lead to a buying customer, so as to close a sale; and	Col. 4 lines 12-19: "The system includes one or more <u>transaction terminals</u>, coupled to a transaction processor that stores the customer database. A transaction terminal is used to <u>transmit a customer information request</u> (such as for check transaction verification), which includes an automatically read customer's check identification number, from the point of sale (POS) to the transaction processor." Col. 67 line 59 – Col. 68 line 12. FIG. 17 illustrates a program flow chart of a marketing technique utilizing the present invention, wherein coupons may be distributed to customers based upon the frequency of shopping, dollar volume or' other criteria based upon the shopping habits of the customer. … The technique shown in FIG. 17 enables the stores to issue coupons and other inducements to customers based upon the shopping habits of the customer. For example, the technique shown in FIG. 17 enables the store to reward a high volume shopper in order to hold on to especially good shoppers. Alternatively, the store can award a lesser incentive package to good shoppers in order to maintain a consistency such that each shopper receives a coupon package. Importantly, the technique enables a high incentive coupon pack to be delivered to a customer who is a secondary shopper or who is an infrequent shopper, in order to make them a primary shopper.

U.S. Pat. No 6,067,525 claim 7	U.S. Pat. No 6,067,525 claim 7 with Court's claim construction	Deaton U.S. Pat. No. 5,201,010
		Col. 70 line 50 – Col. 71 line 21. FIG. 18A-C illustrates a technique for generating coupons based upon the particular transaction currently being accomplished by the customer. The technique of FIG. 18 detects the particular store departments in which the products being purchased are located. … For example, the technique shown in FIG. III detects whether or not items have been purchased from the meat department, dairy department or deli. Based upon data stored within the computer, the decision is then made as to whether to award a coupon and what type of coupon to award. For example, if the data illustrates that over a period of time a shopper shows a consistent failure to shop at the delicatessen, then when the customer's check identification is scanned into the check reader 119, the processor 110 pulls up the customer's history and generates a coupon to induce the customer to shop at the delicatessen the next time the customer shops. This inducing can be done by providing the customer with a very high value coupon used only for deli shopping. Similarly, the stored data in processor 110 may contain information regarding particular product groups. If it is determined that the customer is a frequent shopper but does not purchase coffee, the data may determine that a coupon providing a large discount on coffee would be suitable to give to the customer. Alternatively, the system might determine that the customer had no history of buying a specific brand of coffee, and incentive coupons can be distributed for that brand of coffee.
a customer retention subsystem configured to convert an existing customer into a lead, so as to generate	a customer retention **[system that is part of a larger system]** configured to convert an existing customer	Col. 4 lines 12-19: "The system includes one or more <u>transaction terminals</u>, coupled to a transaction processor that stores the customer database. A transaction terminal is used to <u>transmit a customer information request</u> (such as for

U.S. Pat. No 6,067,525 claim 7	U.S. Pat. No 6,067,525 claim 7 with Court's claim construction	Deaton U.S. Pat. No. 5,201,010
repeat sales.	into a lead, so as to generate repeat sales.	check transaction verification), which includes an automatically read customer's check identification number, from the point of sale (POS) to the transaction processor." Col. 67 line 59 – Col. 68 line 12. FIG. 17 illustrates a program flow chart of a marketing technique utilizing the present invention, wherein coupons may be distributed to customers based upon the frequency of shopping, dollar volume or' other criteria based upon the shopping habits of the customer. … The technique shown in FIG. 17 enables the stores to issue coupons and other inducements to customers based upon the shopping habits of the customer. For example, the technique shown in FIG. 17 enables the store to reward a high volume shopper in order to hold on to especially good shoppers. Alternatively, the store can award a lesser incentive package to good shoppers in order to maintain a consistency such that each shopper receives a coupon package. Importantly, the technique enables a high incentive coupon pack to be delivered to a customer who is a secondary shopper or who is an infrequent shopper, in order to make them a primary shopper. Col. 70 line 50 – Col. 71 line 21. FIG. 18A-C illustrates a technique for generating coupons based upon the particular transaction currently being accomplished by the customer. The technique of FIG. 18 detects the particular store departments in which the products being purchased are located. … For example, the technique shown in FIG. III detects whether or not items have been purchased from the meat department, dairy department or deli. Based upon data stored within the computer, the decision is then made as to whether to award a coupon and what type of coupon to award. For example, if the data illustrates that over a period of time a

U.S. Pat. No 6,067,525 claim 7	U.S. Pat. No 6,067,525 claim 7 with Court's claim construction	Deaton U.S. Pat. No. 5,201,010
		shopper shows a consistent failure to shop at the delicatessen, then when the customer's check identification is scanned into the check reader 119, the processor 110 pulls up the customer's history and generates a coupon to induce the customer to shop at the delicatessen the next time the customer shops. This inducing can be done by providing the customer with a very high value coupon used only for deli shopping. Similarly, the stored data in processor 110 may contain information regarding particular product groups. If it is determined that the customer is a frequent shopper but does not purchase coffee, the data may determine that a coupon providing a large discount on coffee would be suitable to give to the customer. Alternatively, the system might determine that the customer had no history of buying a specific brand of coffee, and incentive coupons can be distributed for that brand of coffee.

U.S. Pat. No 6,067,525 claim 8	U.S. Pat. No 6,067,525 claim 8 with Court's claim construction	Deaton U.S. Pat. No. 5,201,010
A system as recited in claim 1, wherein the plurality of subsystems comprises:	A system as recited in claim 1, wherein the plurality of **[systems that are parts of a larger system]** comprises:	[Claim 1 chart incorporated by reference]
a time with customer subsystem configured to convert a lead to a buying customer and prompting the buying customer to make a buying decision, so as to close a sale; and	a time with customer **[system that is part of a larger system]** configured to convert a lead to a buying customer and prompting the buying customer to make a buying decision, so as to close a sale; and	Col. 4 lines 12-19: "The system includes one or more <u>transaction terminals</u>, coupled to a transaction processor that stores the customer database. A transaction terminal is used to <u>transmit a customer information request</u> (such as for check transaction verification), which includes an automatically read customer's check identification number, from the point of sale (POS) to the transaction processor." Col. 67 line 59 – Col. 68 line 12. FIG. 17 illustrates a program flow chart of a marketing technique utilizing the present invention, wherein coupons may be distributed to customers based upon the frequency of shopping, dollar volume or' other criteria based upon the shopping habits of the customer. … The technique shown in FIG. 17 enables the stores to issue coupons and other inducements to customers based upon the shopping habits of the customer. For example, the technique shown in FIG. 17 enables the store to reward a high volume shopper in order to hold on to especially good shoppers. Alternatively, the store can award a lesser incentive package to good shoppers in order to maintain a consistency such that each shopper receives a coupon package. Importantly, the technique enables a high incentive coupon pack to be delivered to a customer who is a secondary shopper or who is an infrequent shopper, in order to make them a primary shopper.

U.S. Pat. No 6,067,525 claim 8	U.S. Pat. No 6,067,525 claim 8 with Court's claim construction	Deaton U.S. Pat. No. 5,201,010
		Col. 70 line 50 – Col. 71 line 21. FIG. 18A-C illustrates a technique for generating coupons based upon the particular transaction currently being accomplished by the customer. The technique of FIG. 18 detects the particular store departments in which the products being purchased are located. … For example, the technique shown in FIG. III detects whether or not items have been purchased from the meat department, dairy department or deli. Based upon data stored within the computer, the decision is then made as to whether to award a coupon and what type of coupon to award. For example, if the data illustrates that over a period of time a shopper shows a consistent failure to shop at the delicatessen, then when the customer's check identification is scanned into the check reader 119, the processor 110 pulls up the customer's history and generates a coupon to induce the customer to shop at the delicatessen the next time the customer shops. This inducing can be done by providing the customer with a very high value coupon used only for deli shopping. Similarly, the stored data in processor 110 may contain information regarding particular product groups. If it is determined that the customer is a frequent shopper but does not purchase coffee, the data may determine that a coupon providing a large discount on coffee would be suitable to give to the customer. Alternatively, the system might determine that the customer had no history of buying a specific brand of coffee, and incentive coupons can be distributed for that brand of coffee.
a self management subsystem configured to assist a salesperson in managing sales information.	a self management **[system that is part of a larger system]** configured to assist a salesperson in managing	Col. 5 line 48-55. An Event Manager Task that implements system activities such as backup and database purge, and in the case of multiple-store systems, implements host/remote communications activities to transfer selected

U.S. Pat. No 6,067,525 claim 8	U.S. Pat. No 6,067,525 claim 8 with Court's claim construction	Deaton U.S. Pat. No. 5,201,010
	sales information.	customer information among the stores for updating each store's local customer database with the selected global customer information. Col. 6 lines 25-33. For multiple-store businesses, the system can use automatic host/remote transfer of selected customer information to upgrade the local customer database at each store with global customer information (such as those customers with CAUTION and NEGATIVE check verification status), thereby maximizing protection against bad checks while maintaining the local character of the store's customer database. Col. 33, lines 55-59. The check transaction processing system allows a store to build and maintain a customer database containing customer information useful for identifying new customers and developing customer profiles;

U.S. Pat. No 6,067,525 claim 10	U.S. Pat. No 6,067,525 claim 10 with Court's claim construction	Deaton U.S. Pat. No. 5,201,010
A system as recited in claim 1, wherein the plurality of subsystems comprises:	A system as recited in claim 1, wherein the plurality of **[systems that are parts of a larger system]** comprises:	[Claim 1 chart incorporated by reference]
a time with customer subsystem configured to convert a lead to a buying customer, so as to close a sale; and	a time with customer **[system that is part of a larger system]** configured to convert a lead to a buying customer, so as to close a sale; and	Col. 4 lines 12-19: "The system includes one or more <u>transaction terminals</u>, coupled to a transaction processor that stores the customer database. A transaction terminal is used to <u>transmit a customer information request</u> (such as for check transaction verification), which includes an automatically read customer's check identification number, from the point of sale (POS) to the transaction processor." Col. 67 line 59 – Col. 68 line 12. FIG. 17 illustrates a program flow chart of a marketing technique utilizing the present invention, wherein coupons may be distributed to customers based upon the frequency of shopping, dollar volume or' other criteria based upon the shopping habits of the customer. … The technique shown in FIG. 17 enables the stores to issue coupons and other inducements to customers based upon the shopping habits of the customer. For example, the technique shown in FIG. 17 enables the store to reward a high volume shopper in order to hold on to especially good shoppers. Alternatively, the store can award a lesser incentive package to good shoppers in order to maintain a consistency such that each shopper receives a coupon package. Importantly, the technique enables a high incentive coupon pack to be delivered to a customer who is a secondary shopper or who is an infrequent shopper, in order to make them a primary shopper.

U.S. Pat. No 6,067,525 claim 10	U.S. Pat. No 6,067,525 claim 10 with Court's claim construction	Deaton U.S. Pat. No. 5,201,010
		Col. 70 line 50 – Col. 71 line 21. FIG. 18A-C illustrates a technique for generating coupons based upon the particular transaction currently being accomplished by the customer. The technique of FIG. 18 detects the particular store departments in which the products being purchased are located. … For example, the technique shown in FIG. III detects whether or not items have been purchased from the meat department, dairy department or deli. Based upon data stored within the computer, the decision is then made as to whether to award a coupon and what type of coupon to award. For example, if the data illustrates that over a period of time a shopper shows a consistent failure to shop at the delicatessen, then when the customer's check identification is scanned into the check reader 119, the processor 110 pulls up the customer's history and generates a coupon to induce the customer to shop at the delicatessen the next time the customer shops. This inducing can be done by providing the customer with a very high value coupon used only for deli shopping. Similarly, the stored data in processor 110 may contain information regarding particular product groups. If it is determined that the customer is a frequent shopper but does not purchase coffee, the data may determine that a coupon providing a large discount on coffee would be suitable to give to the customer. Alternatively, the system might determine that the customer had no history of buying a specific brand of coffee, and incentive coupons can be distributed for that brand of coffee.
a sales management subsystem configured to assist a sales manager in managing a plurality of	a sales management [system that is part of a larger system] configured to assist a sales manager in managing	Col. 5 line 48-55. An Event Manager Task that implements system activities such as backup and database purge, and in the case of multiple-store systems, implements host/remote communications activities to transfer selected

U.S. Pat. No 6,067,525 claim 10	U.S. Pat. No 6,067,525 claim 10 with Court's claim construction	Deaton U.S. Pat. No. 5,201,010
salespeople.	a plurality of salespeople.	customer information among the stores for updating each store's local customer database with the selected global customer information. Col. 6 lines 25-33. For multiple-store businesses, the system can use automatic host/remote transfer of selected customer information to upgrade the local customer database at each store with global customer information (such as those customers with CAUTION and NEGATIVE check verification status), thereby maximizing protection against bad checks while maintaining the local character of the store's customer database. Col. 33, lines 55-59. The check transaction processing system allows a store to build and maintain a customer database containing customer information useful for identifying new customers and developing customer profiles;

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U.S. Pat. No 6,067,525 claim 12	U.S. Pat. No 6,067,525 claim 12 with Court's claim construction	Deaton U.S. Pat. No. 5,201,010
A system as recited in claim 1, wherein the plurality of subsystems comprises:	A system as recited in claim 1, wherein the plurality of **[systems that are parts of a larger system]** comprises:	[Claim 1 chart incorporated by reference]
a lead management subsystem configured to manage a conversion of a lead to a prospect and of the prospect to a buying customer, and	a lead management **[system that is part of a larger system]** configured to manage a conversion of a lead to a prospect and of the prospect to a buying customer, and	Col. 4 lines 12-19: "The system includes one or more <u>transaction terminals</u>, coupled to a transaction processor that stores the customer database. A transaction terminal is used to <u>transmit a customer information request</u> (such as for check transaction verification), which includes an automatically read customer's check identification number, from the point of sale (POS) to the transaction processor." Col. 67 line 59 – Col. 68 line 12. FIG. 17 illustrates a program flow chart of a marketing technique utilizing the present invention, wherein coupons may be distributed to customers based upon the frequency of shopping, dollar volume or' other criteria based upon the shopping habits of the customer. … The technique shown in FIG. 17 enables the stores to issue coupons and other inducements to customers based upon the shopping habits of the customer. For example, the technique shown in FIG. 17 enables the store to reward a high volume shopper in order to hold on to especially good shoppers. Alternatively, the store can award a lesser incentive package to good shoppers in order to maintain a consistency such that each shopper receives a coupon package. Importantly, the technique enables a high incentive coupon pack to be delivered to a customer who is a secondary shopper or who is an infrequent shopper, in order to make them a primary shopper.

U.S. Pat. No 6,067,525 claim 12	U.S. Pat. No 6,067,525 claim 12 with Court's claim construction	Deaton U.S. Pat. No. 5,201,010
		Col. 70 line 50 – Col. 71 line 21. FIG. 18A-C illustrates a technique for generating coupons based upon the particular transaction currently being accomplished by the customer. The technique of FIG. 18 detects the particular store departments in which the products being purchased are located. … For example, the technique shown in FIG. III detects whether or not items have been purchased from the meat department, dairy department or deli. Based upon data stored within the computer, the decision is then made as to whether to award a coupon and what type of coupon to award. For example, if the data illustrates that over a period of time a shopper shows a consistent failure to shop at the delicatessen, then when the customer's check identification is scanned into the check reader 119, the processor 110 pulls up the customer's history and generates a coupon to induce the customer to shop at the delicatessen the next time the customer shops. This inducing can be done by providing the customer with a very high value coupon used only for deli shopping. Similarly, the stored data in processor 110 may contain information regarding particular product groups. If it is determined that the customer is a frequent shopper but does not purchase coffee, the data may determine that a coupon providing a large discount on coffee would be suitable to give to the customer. Alternatively, the system might determine that the customer had no history of buying a specific brand of coffee, and incentive coupons can be distributed for that brand of coffee.
a self management subsystem configured to assist a salesperson in managing sales information.	a self management [system that is part of a larger system] configured to assist a salesperson in managing	Col. 5 line 48-55. An Event Manager Task that implements system activities such as backup and database purge, and in the case of multiple-store systems, implements host/remote communications activities to transfer selected

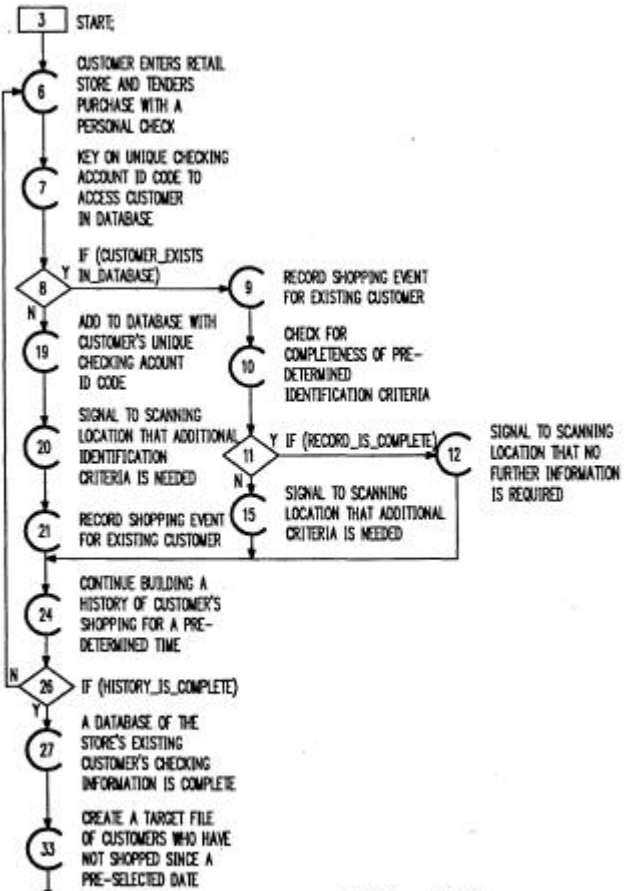| U.S. Pat. No 6,067,525 claim 12	U.S. Pat. No 6,067,525 claim 12 with Court's claim construction	Deaton U.S. Pat. No. 5,201,010
	sales information.	customer information among the stores for updating each store's local customer database with the selected global customer information.
		Col. 6 lines 25-33.
		For multiple-store businesses, the system can use automatic host/remote transfer of selected customer information to upgrade the local customer database at each store with global customer information (such as those customers with CAUTION and NEGATIVE check verification status), thereby maximizing protection against bad checks while maintaining the local character of the store's customer database.
		Col. 33, lines 55-59.
		The check transaction processing system allows a store to build and maintain a customer database containing customer information useful for identifying new customers and developing customer profiles;

U.S. Pat. No 6,067,525 claim 20	U.S. Pat. No 6,067,525 claim 20 with Court's claim construction	Deaton U.S. Pat. No. 5,201,010
A method of facilitating a sales process using a computer arrangement having a plurality of subsystems configured to facilitate one or more actions performed during at least one phase of the sales process, the method comprising the steps of:	A method of facilitating a sales process using a computer arrangement having a plurality of **[systems that are part of a larger system]** configured to facilitate one or more actions performed during at least one phase of the sales process, the method comprising the steps of:	The preamble is not a limitation, nonetheless abstract: "A method and system is disclosed for performing targeted marking on infrequent shoppers." Col. 3 lines 50-60: "Important aspects of the present invention are to facilitate check transactions by reducing the requirements for customer identification, to enable a store to adopt a risk management approach to check verification based on a customer's transactional history (frequency and dollar volume over specified intervals), and to improve a store's marketing and other customer relations programs by collecting transactional data for that store, both current and historical, that can be used to identify new or infrequent customers, develop customer profiles and to perform targeted marketing." Col. 9, lines 9-14: "A transaction terminal transmits a request (including a function code identifying the requested function together with other request data) to the transaction processor, which processes the request and returns an appropriate response." Col. 4 lines 12-19: "The system includes one or more transaction terminals, coupled to a transaction processor that stores the customer database. A transaction terminal is used to transmit a customer information request (such as for check transaction verification), which includes an automatically read customer's check identification number, from the point of sale (POS) to the transaction processor."

U.S. Pat. No 6,067,525 claim 20	U.S. Pat. No 6,067,525 claim 20 with Court's claim construction	Deaton U.S. Pat. No. 5,201,010
<u>automatically detecting</u> one or more <u>changes in state characteristic of an event</u> occurring in the sales process;	automatically detecting one or more **[changes in a unique configuration of information within the system that is indicative of the occurrence of an event within the system]** occurring in the sales process;	Col. 4 lines 12-28: "The system includes one or more transaction terminals, coupled to a transaction processor that stores the customer database. A transaction terminal is used to transmit a customer information request (such as for check transaction verification), which includes an <u>automatically read customer's check identification number</u>, from the point of sale (POS) to the transaction processor. The transaction processor processes the customer information request, using the check identification number to search the customer database and retrieve the corresponding customer record, if any. Based on the customer information in the customer record, or the lack of a customer record, the transaction processor returns an appropriate response (such as check verification status) and marketing response information to the transaction terminal." Col. 9 lines 15-21: "For example, in the case of check verification, a transaction terminal is used to transmit a verification request-the customer's check ID, the verification function code, and the dollar amount. The transaction processor processes the request, updates the customer database to reflect that transaction, and returns a customer verification status response." Col. 31 lines 52-56: "Event-driven activities are performed automatically by the check transaction processing system to implement certain functions without operator intervention. The configuration and timing of these activities is a matter of routine design selection."
inferring occurrence of the	**[logical process by which**	Col. 5, lines 19-27:

U.S. Pat. No 6,067,525 claim 20	U.S. Pat. No 6,067,525 claim 20 with Court's claim construction	Deaton U.S. Pat. No. 5,201,010
event and a context in which the event occurred based at least in part on the detected changes in state; and	**the fact that the event has occurred is derived by application of logical rules]** and **[logical process by which the fact that information already existing within the system that becomes relevant upon the occurrence of the event is derived by application of logical rules]** based at least in part on the detected changes in state; and	"Moreover, because the check transactional data is generated and maintained locally, it provides <u>significant information about the store's customers</u> over and above the information necessary for check verification risk management. New customers are readily identified, and frequency and dollar volume information may be used to <u>establish customer profiles</u> and to target advertising, marketing and promotional programs, and for other customer relations purposes."

Col. 6, lines 10-24:
"In addition to check verification status, the system collects and accumulates selected <u>additional transactional data, including frequency and dollar amounts over specified intervals</u> (such as Day/Week/Month/Quarter/Total) and <u>other historical information</u> such as departments shopped, products purchased and the like, thus allowing the store to adopt risk management approach to check verification tailored to the store's particular customer and financial situation by conditioning check authorization on meeting certain selected transactional limits regardless of customer status (the CALL MANAGER response), and allowing the store to develop <u>customer profiles</u> and to target advertising, marketing and promotions, and otherwise improve customer relations."

Col. 65 line 59 – Col. 66 line 12:
"The checking account identification number is entered into processor 110 which contain a database that maintains customer records including the customer's name and address, the checking account identification number, and customer shopping habits and transactional data over a preselected time interval. The checking account identification number is compared with the database. A response is generated by the processor 110 to signal the presence of the customer's checking account identification number or the failure to locate the customer's checking |

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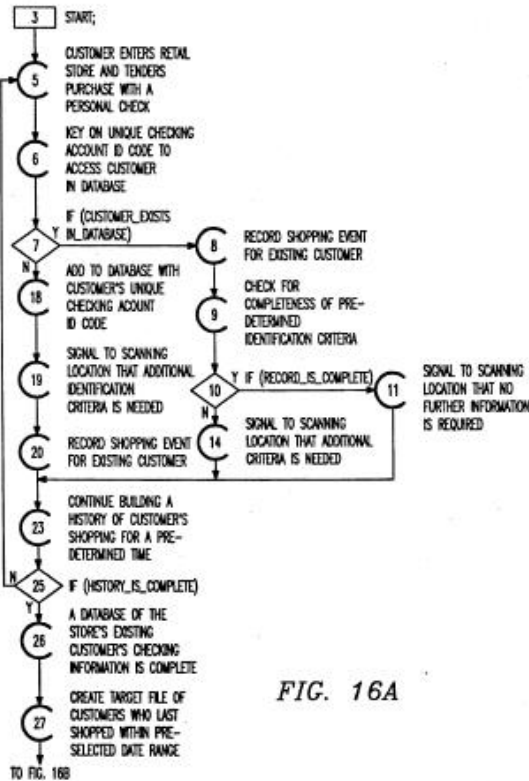| U.S. Pat. No 6,067,525 claim 20	U.S. Pat. No 6,067,525 claim 20 with Court's claim construction	Deaton U.S. Pat. No. 5,201,010
		account identification number. A new record is then created in the database for that customer's checking account identification number in response to a processor 110 response indicating the failure to locate, so that the customer's name and address is entered into the record along with a shopping incidence and shopping data being recorded in the database concurrently. A list of customers is then generated in the database whose last transaction date is prior to a preselected interval of inactivity so that grouping or subgrouping of customers is available for marketing efforts." Col. 66 lines 13-19: "Alternatively, the system may use dollar amounts to determine an "infrequent shopper". If the system determines that the cumulative dollars spent at the store by a specified customer is equal to or less than a predetermined dollar level within a predetermined time interval, the specified customer is designated as an "infrequent shopper"." Col. 66 lines 20-30: "As another alternative, the database is maintained with the shopping history for each unique check identification. Each time the system detects a check with a unique check identification number, it is checked against the database. If the last date shopped is prior to a preselected date, a signal is generated and transmitted to the POS. The check is then marked or set aside to be used to create a mailing list. Alternatively, the signal may be used to prompt the store clerk to disburse incentive coupons at the POS." Col. 66, lines 32-38: "5.4. Marketing Based On Range Of Last Shopping Dates As noted above, it would be advantageous to be able to selectively

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U.S. Pat. No 6,067,525 claim 20	U.S. Pat. No 6,067,525 claim 20 with Court's claim construction	Deaton U.S. Pat. No. 5,201,010
		market to infrequent shoppers. FIG. 15 illustrated a database building technique to obtain a list of infrequent shoppers based upon their last shopping date.

U.S. Pat. No 6,067,525 claim 20	U.S. Pat. No 6,067,525 claim 20 with Court's claim construction	Deaton U.S. Pat. No. 5,201,010
		FIG. 15A

U.S. Pat. No 6,067,525 claim 20	U.S. Pat. No 6,067,525 claim 20 with Court's claim construction	Deaton U.S. Pat. No. 5,201,010
		FROM FIG. 15A 34 READ FIRST RECORD IN DATABASE OF CUSTOMER'S CHECKING ACCOUNT INFORMATION 37 LOCATE LAST TRANSACTION DATE IN CUSTOMER'S SHOPPING HISTORY 38 COMPARE LAST TRANSACTION DATE WITH PRE-SELECTED TARGET DATE 40 IF (SHOPPED_SINCE_ TARGET_DATE) Y / N 44 WRITE RECORD FROM STORE'S DATABASE OF CUSTOMERS TO TARGET FILE 47 READ NEXT RECORD FROM STORE'S DATABASE OF CUSTOMERS 49 IF (END_OF_FILE) N / Y 50 TARGET FILE CONTAINS CUSTOMERS NOT SHOPPING SINCE PRE-SELECTED TARGET DATE 55 MARKETING MAY NOW BE TARGETED AT CUSTOMER'S NOT SHOPPING SINCE TARGET DATE 55 (FUNCTION RETURN) *FIG. 15B* Col. 66, lines 32-38: FIG. 16 illustrates a database building technique to provide a list of a store's customers whose last shopping date falls within a preselected

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U.S. Pat. No 6,067,525 claim 20	U.S. Pat. No 6,067,525 claim 20 with Court's claim construction	Deaton U.S. Pat. No. 5,201,010
		shopping date range. … In accordance with the techniques shown in FIG. 16, a customer's checking account identification number is entered as a unique customer identification code by the check reader 119. Host processor 110 is programmed to store a database which includes a plurality of unique customer identification codes and check cashing history of prior customers of the retail establishment, including date of check transactions. The processor then compares each newly entered unique customer identification code against the stored database. A signal is generated to indicate the presence of a complete customer information record or of an incomplete customer information record as a result of the comparison. A second database is then generated which lists customers whose last unique customer identification code entry date falls within a preselected date range. A promotion may then be selectively offered by the retail establishment to customers within the second database. For example, coupons or other enticements may be mailed directly to the customers on the second database, or distributed at the POS."

U.S. Pat. No 6,067,525 claim 20	U.S. Pat. No 6,067,525 claim 20 with Court's claim construction	Deaton U.S. Pat. No. 5,201,010
		FIG. 16A

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U.S. Pat. No 6,067,525 claim 20	U.S. Pat. No 6,067,525 claim 20 with Court's claim construction	Deaton U.S. Pat. No. 5,201,010
		FIG. 16B
automatically initiating an operation in one or more particular subsystems of the computer to facilitate a new action based on the inferred	automatically initiating an operation in one or more particular **[systems that are part of a larger system]** of the computer to	Col. 52 lines 31-39: "At the appropriate event time, the Event Manager Task spawns the event subtask, which receives (822) the current record from the Event Table. The current event record includes a current event time and an activity pointer to each of up to 10 associated activities identified in the Activity

U.S. Pat. No 6,067,525 claim 20	U.S. Pat. No 6,067,525 claim 20 with Court's claim construction	Deaton U.S. Pat. No. 5,201,010
context.	facilitate a new action based on the inferred context.	Table. The event subtask sequentially executes each activity associated with the current event time." Col. 52 lines 66-68: "For each activity code read from the Activity Table, the event subtask dispatches (830) to a corresponding activity routine for execution." Col. 67 line 59 – Col. 68 line 12. FIG. 17 illustrates a program flow chart of a marketing technique utilizing the present invention, wherein coupons may be distributed to customers based upon the frequency of shopping, dollar volume or' other criteria based upon the shopping habits of the customer. … The technique shown in FIG. 17 enables the stores to issue coupons and other inducements to customers based upon the shopping habits of the customer. For example, the technique shown in FIG. 17 enables the store to reward a high volume shopper in order to hold on to especially good shoppers. Alternatively, the store can award a lesser incentive package to good shoppers in order to maintain a consistency such that each shopper receives a coupon package. Importantly, the technique enables a high incentive coupon pack to be delivered to a customer who is a secondary shopper or who is an infrequent shopper, in order to make them a primary shopper. Col. 70 lines 13-16. A … technique of distributing coupons utilizes a system to actually print, at the point of sale, coupons bearing the desired information based upon selected criteria. Col. 70 lines 30-34.

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U.S. Pat. No 6,067,525 claim 20	U.S. Pat. No 6,067,525 claim 20 with Court's claim construction	Deaton U.S. Pat. No. 5,201,010
		[C]oupon dispensing apparatus … may be utilized to print the coupons as described in FIG. 16A-B, … based upon the criteria and the operation of the present invention.

U.S. Pat. No 6,067,525 claim 20	U.S. Pat. No 6,067,525 claim 20 with Court's claim construction	Deaton U.S. Pat. No. 5,201,010

FIG. 17A

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U.S. Pat. No 6,067,525 claim 20	U.S. Pat. No 6,067,525 claim 20 with Court's claim construction	Deaton U.S. Pat. No. 5,201,010
		FIG. 17B Col. 70 line 50 – Col. 71 line 21. FIG. 18A-C illustrates a technique for generating coupons based upon the particular transaction currently being accomplished by the customer. The technique of FIG. 18 detects the particular store departments in which the products being purchased are located. … For example, the technique shown in FIG. III detects whether or not items have been purchased from the meat department, dairy department or deli. Based upon data stored within the computer, the decision is then made as to whether to award a

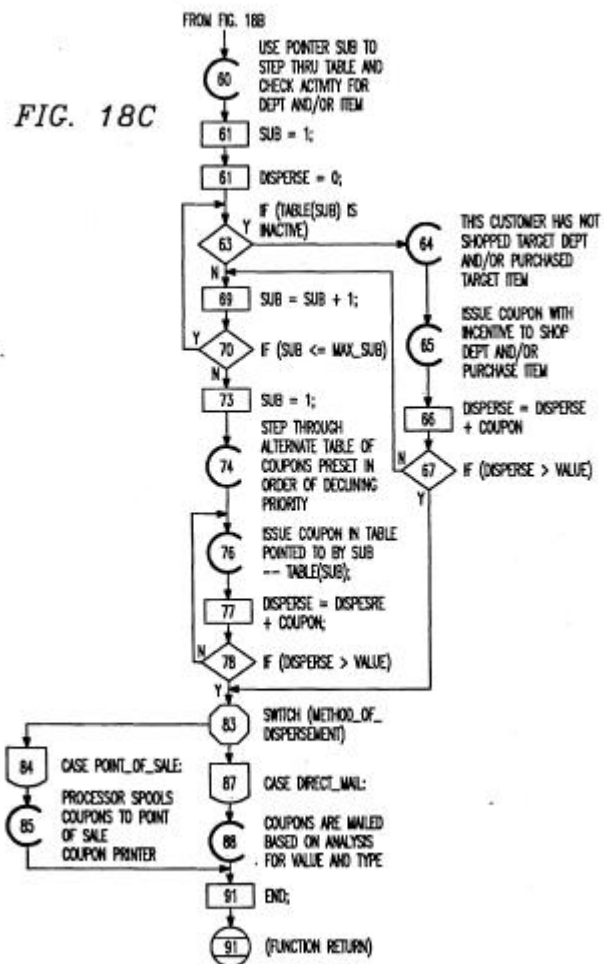| U.S. Pat. No 6,067,525 claim 20	U.S. Pat. No 6,067,525 claim 20 with Court's claim construction	Deaton U.S. Pat. No. 5,201,010
		coupon and what type of coupon to award. For example, if the data illustrates that over a period of time a shopper shows a consistent failure to shop at the delicatessen, then when the customer's check identification is scanned into the check reader 119, the processor 110 pulls up the customer's history and generates a coupon to induce the customer to shop at the delicatessen the next time the customer shops. This inducing can be done by providing the customer with a very high value coupon used only for deli shopping. Similarly, the stored data in processor 110 may contain information regarding particular product groups. If it is determined that the customer is a frequent shopper but does not purchase coffee, the data may determine that a coupon providing a large discount on coffee would be suitable to give to the customer. Alternatively, the system might determine that the customer had no history of buying a specific brand of coffee, and incentive coupons can be distributed for that brand of coffee. To provide this information, information regarding the particular product and the department of the product is generated by the bar code reader 1130, or through entry through the cash register, and transmitted to the host processor 110. The host processor 110 then identifies each particular product being purchased, compares it against the stored data tables and generates an indication of the type of coupon to be given to the customer.

U.S. Pat. No 6,067,525 claim 20	U.S. Pat. No 6,067,525 claim 20 with Court's claim construction	Deaton U.S. Pat. No. 5,201,010

FIG. 18A

3 START;

5 CUSTOMER'S PURCHASE IS TRANSACTED WITH THE USE OF BAR CODE SCANNING REGISTER

7 ITEM IS SCANNED BY BAR CODE SCANNING REGISTER

8 CASH REGISTER MAINTAINS DEPARTMENT, PRODUCT, AND PRODUCT GROUP SHOPPED

9 F (ALL_ITEMS_ARE_SCANNED)

10 CUSTOMER TENDERS PURCHASE WITH A PERSONAL CHECK OR PROVIDES PHONE #

15 SEND CHECK ID CODE OR PHONE # TO PROCESSOR FOR ACCESSING CUSTOMER DATABASE

16 F (CUSTOMER_IS_IN_DATABASE)

19 RECORD IS CREATED FOR CUSTOMER AND ALL FIELDS ARE SET TO INITIALIZED VALUES

22 SEND INFORMATION ON SCANNED ITEMS TO PROCESSOR CONTAINING DATABASE

23 PROCESSOR RECORDS SHOPPING EVENT AND DOLLARS SPENT TO PROVIDE SHOPPING HISTORY

24 PROCESSOR UPDATES CUSTOMER'S RECORD WITH SCANNED ITEMS INFORMATION

26 POINT OF SALE COUPONS OF VARYING VALUE ARE AVAILABLE FOR CUSTOMER

TO FIG. 18B |

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U.S. Pat. No 6,067,525 claim 20	U.S. Pat. No 6,067,525 claim 20 with Court's claim construction	Deaton U.S. Pat. No. 5,201,010

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U.S. Pat. No 6,067,525 claim 20	U.S. Pat. No 6,067,525 claim 20 with Court's claim construction	Deaton U.S. Pat. No. 5,201,010

U.S. Pat. No 6,067, 525 claim 24	U.S. Pat. No 6,067,525 claim 24 with Court's claim construction	Deaton U.S. Pat. No. 5,201,010
A method as recited in claim 20,	A method as recited in claim 20,	[Claim 20 chart incorporated by reference]
wherein the inferred context includes information related to at least one phase of the sales process.	wherein the inferred **[information already existing within the system that becomes relevant upon the occurrence of an event]** includes information related to at least one phase of the sales process.	Col. 5, lines 19-27: "Moreover, because the check transactional data is generated and maintained locally, it provides significant information about the store's customers over and above the information necessary for check verification risk management. New customers are readily identified, and frequency and dollar volume information may be used to establish customer profiles and to target advertising, marketing and promotional programs, and for other customer relations purposes." Col. 6, lines 10-24: "In addition to check verification status, the system collects and accumulates selected additional transactional data, including frequency and dollar amounts over specified intervals (such as Day/Week/Month/Quarter/Total) and other historical information such as departments shopped, products purchased and the like, thus allowing the store to adopt risk management approach to check verification tailored to the store's particular customer and financial situation by conditioning check authorization on meeting certain selected transactional limits regardless of customer status (the CALL MANAGER response), and allowing the store to develop customer profiles and to target advertising, marketing and promotions, and otherwise improve customer relations." Col. 65 line 59 – Col. 66 line 12: "The checking account identification number is entered into processor 110 which contain a database that maintains customer records including

U.S. Pat. No 6,067, 525 claim 24	U.S. Pat. No 6,067,525 claim 24 with Court's claim construction	Deaton U.S. Pat. No. 5,201,010
		the customer's name and address, the checking account identification number, and customer shopping habits and transactional data over a preselected time interval. The checking account identification number is compared with the database. A response is generated by the processor 110 to signal the presence of the customer's checking account identification number or the failure to locate the customer's checking account identification number. … A list of customers is then generated in the database whose last transaction date is prior to a preselected interval of inactivity so that grouping or subgrouping of customers is available for marketing efforts."

U.S. Pat. No 6,067, 525 claim 34	U.S. Pat. No 6,067,525 claim 34 with Court's claim construction	Deaton U.S. Pat. No. 5,201,010
A method as recited in claim 20, further comprising the steps of:	A method as recited in claim 20, further comprising the steps of:	[Claim 20 chart incorporated by reference]
inferring occurrence of an event while converting a lead to a buying customer; and	**[logical process by which the fact that the event has occurred is derived by application of logical rules]** while converting a lead to a buying customer; and	Col. 4 lines 12-19: "The system includes one or more <u>transaction terminals</u>, coupled to a transaction processor that stores the customer database. A transaction terminal is used to <u>transmit a customer information request</u> (such as for check transaction verification), which includes an automatically read customer's check identification number, from the point of sale (POS) to the transaction processor." Col. 67 line 59 – Col. 68 line 12. FIG. 17 illustrates a program flow chart of a marketing technique utilizing the present invention, wherein coupons may be distributed to customers based upon the frequency of shopping, dollar volume or' other criteria based upon the shopping habits of the customer. … The technique shown in FIG. 17 enables the stores to issue coupons and other inducements to customers based upon the shopping habits of the customer. For example, the technique shown in FIG. 17 enables the store to reward a high volume shopper in order to hold on to especially good shoppers. Alternatively, the store can award a lesser incentive package to good shoppers in order to maintain a consistency such that each shopper receives a coupon package. Importantly, the technique enables a high incentive coupon pack to be delivered to a customer who is a secondary shopper or who is an infrequent shopper, in order to make them a primary shopper. Col. 70 line 50 – Col. 71 line 21.

U.S. Pat. No 6,067, 525 claim 34	U.S. Pat. No 6,067,525 claim 34 with Court's claim construction	Deaton U.S. Pat. No. 5,201,010
		FIG. 18A-C illustrates a technique for generating coupons based upon the particular transaction currently being accomplished by the customer. The technique of FIG. 18 detects the particular store departments in which the products being purchased are located. … For example, the technique shown in FIG. III detects whether or not items have been purchased from the meat department, dairy department or deli. Based upon data stored within the computer, the decision is then made as to whether to award a coupon and what type of coupon to award. For example, if the data illustrates that over a period of time a shopper shows a consistent failure to shop at the delicatessen, then when the customer's check identification is scanned into the check reader 119, the processor 110 pulls up the customer's history and generates a coupon to induce the customer to shop at the delicatessen the next time the customer shops. This inducing can be done by providing the customer with a very high value coupon used only for deli shopping. Similarly, the stored data in processor 110 may contain information regarding particular product groups. If it is determined that the customer is a frequent shopper but does not purchase coffee, the data may determine that a coupon providing a large discount on coffee would be suitable to give to the customer. Alternatively, the system might determine that the customer had no history of buying a specific brand of coffee, and incentive coupons can be distributed for that brand of coffee.
using the particular subsystem to convert an existing customer into a lead, so as to generate repeat sales.	using the particular **[system that is part of a larger system]** to convert an existing customer into a lead, so as to generate repeat sales.	Col. 4 lines 12-19: "The system includes one or more <u>transaction terminals</u>, coupled to a transaction processor that stores the customer database. A transaction terminal is used to <u>transmit a customer information request</u> (such as for check transaction verification), which includes an automatically read

U.S. Pat. No 6,067, 525 claim 34	U.S. Pat. No 6,067,525 claim 34 with Court's claim construction	Deaton U.S. Pat. No. 5,201,010
		customer's check identification number, from the point of sale (POS) to the transaction processor." Col. 67 line 59 – Col. 68 line 12. FIG. 17 illustrates a program flow chart of a marketing technique utilizing the present invention, wherein coupons may be distributed to customers based upon the frequency of shopping, dollar volume or' other criteria based upon the shopping habits of the customer. … The technique shown in FIG. 17 enables the stores to issue coupons and other inducements to customers based upon the shopping habits of the customer. For example, the technique shown in FIG. 17 enables the store to reward a high volume shopper in order to hold on to especially good shoppers. Alternatively, the store can award a lesser incentive package to good shoppers in order to maintain a consistency such that each shopper receives a coupon package. Importantly, the technique enables a high incentive coupon pack to be delivered to a customer who is a secondary shopper or who is an infrequent shopper, in order to make them a primary shopper. Col. 70 line 50 – Col. 71 line 21. FIG. 18A-C illustrates a technique for generating coupons based upon the particular transaction currently being accomplished by the customer. The technique of FIG. 18 detects the particular store departments in which the products being purchased are located. … For example, the technique shown in FIG. III detects whether or not items have been purchased from the meat department, dairy department or deli. Based upon data stored within the computer, the decision is then made as to whether to award a coupon and what type of coupon to award. For example, if the data illustrates that over a period of time a shopper shows a consistent failure to shop at the delicatessen, then

U.S. Pat. No 6,067, 525 claim 34	U.S. Pat. No 6,067,525 claim 34 with Court's claim construction	Deaton U.S. Pat. No. 5,201,010
		when the customer's check identification is scanned into the check reader 119, the processor 110 pulls up the customer's history and generates a coupon to induce the customer to shop at the delicatessen the next time the customer shops. This inducing can be done by providing the customer with a very high value coupon used only for deli shopping. Similarly, the stored data in processor 110 may contain information regarding particular product groups. If it is determined that the customer is a frequent shopper but does not purchase coffee, the data may determine that a coupon providing a large discount on coffee would be suitable to give to the customer. Alternatively, the system might determine that the customer had no history of buying a specific brand of coffee, and incentive coupons can be distributed for that brand of coffee.

U.S. Pat. No 6,067, 525 claim 35	U.S. Pat. No 6,067,525 claim 35 with Court's claim construction	Deaton U.S. Pat. No. 5,201,010
A method as recited in claim 20, further comprising the steps of:	A method as recited in claim 20, further comprising the steps of:	[Claim 20 chart incorporated by reference]
inferring occurrence of an event while converting a lead to a buying customer and prompting the buying customer to make a buying decision; and	**[logical process by which the fact that the event has occurred is derived by application of logical rules]** while converting a lead to a buying customer and prompting the buying customer to make a buying decision; and	Col. 4 lines 12-19: "The system includes one or more <u>transaction terminals</u>, coupled to a transaction processor that stores the customer database. A transaction terminal is used to <u>transmit a customer information request</u> (such as for check transaction verification), which includes an automatically read customer's check identification number, from the point of sale (POS) to the transaction processor." Col. 67 line 59 – Col. 68 line 12. FIG. 17 illustrates a program flow chart of a marketing technique utilizing the present invention, wherein coupons may be distributed to customers based upon the frequency of shopping, dollar volume or' other criteria based upon the shopping habits of the customer. … The technique shown in FIG. 17 enables the stores to issue coupons and other inducements to customers based upon the shopping habits of the customer. For example, the technique shown in FIG. 17 enables the store to reward a high volume shopper in order to hold on to especially good shoppers. Alternatively, the store can award a lesser incentive package to good shoppers in order to maintain a consistency such that each shopper receives a coupon package. Importantly, the technique enables a high incentive coupon pack to be delivered to a customer who is a secondary shopper or who is an infrequent shopper, in order to make them a primary shopper. Col. 70 line 50 – Col. 71 line 21.

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U.S. Pat. No 6,067, 525 claim 35	U.S. Pat. No 6,067,525 claim 35 with Court's claim construction	Deaton U.S. Pat. No. 5,201,010
		FIG. 18A-C illustrates a technique for generating coupons based upon the particular transaction currently being accomplished by the customer. The technique of FIG. 18 detects the particular store departments in which the products being purchased are located. … For example, the technique shown in FIG. III detects whether or not items have been purchased from the meat department, dairy department or deli. Based upon data stored within the computer, the decision is then made as to whether to award a coupon and what type of coupon to award. For example, if the data illustrates that over a period of time a shopper shows a consistent failure to shop at the delicatessen, then when the customer's check identification is scanned into the check reader 119, the processor 110 pulls up the customer's history and generates a coupon to induce the customer to shop at the delicatessen the next time the customer shops. This inducing can be done by providing the customer with a very high value coupon used only for deli shopping. Similarly, the stored data in processor 110 may contain information regarding particular product groups. If it is determined that the customer is a frequent shopper but does not purchase coffee, the data may determine that a coupon providing a large discount on coffee would be suitable to give to the customer. Alternatively, the system might determine that the customer had no history of buying a specific brand of coffee, and incentive coupons can be distributed for that brand of coffee.
using the particular subsystem to assist a salesperson in managing sales information.	using the particular **[system that is part of a larger system]** to assist a salesperson in managing sales information.	Col. 5 line 48-55. An Event Manager Task that implements system activities such as backup and database purge, and in the case of multiple-store systems, implements host/remote communications activities to transfer selected customer information among the stores for updating each store's local

U.S. Pat. No 6,067, 525 claim 35	U.S. Pat. No 6,067,525 claim 35 with Court's claim construction	Deaton U.S. Pat. No. 5,201,010
		customer database with the selected global customer information.
		Col. 6 lines 25-33.
		For multiple-store businesses, the system can use automatic host/remote transfer of selected customer information to upgrade the local customer database at each store with global customer information (such as those customers with CAUTION and NEGATIVE check verification status), thereby maximizing protection against bad checks while maintaining the local character of the store's customer database.
		Col. 33, lines 55-59.
		The check transaction processing system allows a store to build and maintain a customer database containing customer information useful for identifying new customers and developing customer profiles;

U.S. Pat. No 6,067, 525 claim 37	U.S. Pat. No 6,067,525 claim 37 with Court's claim construction	Deaton U.S. Pat. No. 5,201,010
A method as recited in claim 20, further comprising the steps of:	A method as recited in claim 20, further comprising the steps of:	[Claim 20 chart incorporated by reference]
inferring occurrence of an event while converting a lead to a buying customer; and	**[logical process by which the fact that the event has occurred is derived by application of logical rules]** while converting a lead to a buying customer; and	Col. 4 lines 12-19: "The system includes one or more transaction terminals, coupled to a transaction processor that stores the customer database. A transaction terminal is used to transmit a customer information request (such as for check transaction verification), which includes an automatically read customer's check identification number, from the point of sale (POS) to the transaction processor." Col. 67 line 59 – Col. 68 line 12. FIG. 17 illustrates a program flow chart of a marketing technique utilizing the present invention, wherein coupons may be distributed to customers based upon the frequency of shopping, dollar volume or' other criteria based upon the shopping habits of the customer. … The technique shown in FIG. 17 enables the stores to issue coupons and other inducements to customers based upon the shopping habits of the customer. For example, the technique shown in FIG. 17 enables the store to reward a high volume shopper in order to hold on to especially good shoppers. Alternatively, the store can award a lesser incentive package to good shoppers in order to maintain a consistency such that each shopper receives a coupon package. Importantly, the technique enables a high incentive coupon pack to be delivered to a customer who is a secondary shopper or who is an infrequent shopper, in order to make them a primary shopper. Col. 70 line 50 – Col. 71 line 21.

U.S. Pat. No 6,067, 525 claim 37	U.S. Pat. No 6,067,525 claim 37 with Court's claim construction	Deaton U.S. Pat. No. 5,201,010
		FIG. 18A-C illustrates a technique for generating coupons based upon the particular transaction currently being accomplished by the customer. The technique of FIG. 18 detects the particular store departments in which the products being purchased are located. … For example, the technique shown in FIG. III detects whether or not items have been purchased from the meat department, dairy department or deli. Based upon data stored within the computer, the decision is then made as to whether to award a coupon and what type of coupon to award. For example, if the data illustrates that over a period of time a shopper shows a consistent failure to shop at the delicatessen, then when the customer's check identification is scanned into the check reader 119, the processor 110 pulls up the customer's history and generates a coupon to induce the customer to shop at the delicatessen the next time the customer shops. This inducing can be done by providing the customer with a very high value coupon used only for deli shopping. Similarly, the stored data in processor 110 may contain information regarding particular product groups. If it is determined that the customer is a frequent shopper but does not purchase coffee, the data may determine that a coupon providing a large discount on coffee would be suitable to give to the customer. Alternatively, the system might determine that the customer had no history of buying a specific brand of coffee, and incentive coupons can be distributed for that brand of coffee.
using the particular subsystem to assist a salesperson in managing a plurality of salespeople.	using the particular **[system that is part of a larger system]** to assist a salesperson in managing a plurality of salespeople.	Col. 5 line 48-55. An Event Manager Task that implements system activities such as backup and database purge, and in the case of multiple-store systems, implements host/remote communications activities to transfer selected customer information among the stores for updating each store's local

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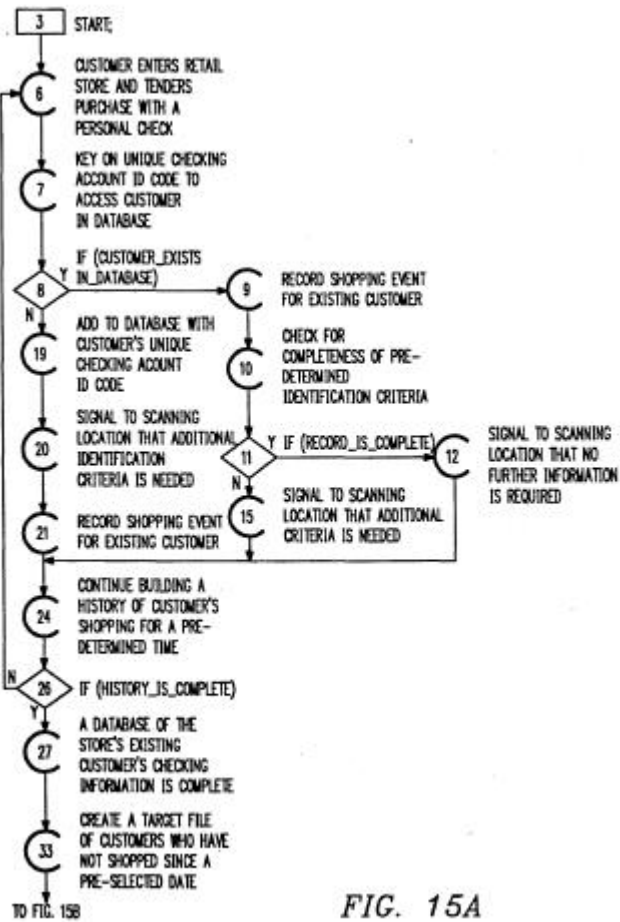| U.S. Pat. No 6,067, 525 claim 37	U.S. Pat. No 6,067,525 claim 37 with Court's claim construction	Deaton U.S. Pat. No. 5,201,010
		customer database with the selected global customer information. Col. 6 lines 25-33. For multiple-store businesses, the system can use automatic host/remote transfer of selected customer information to upgrade the local customer database at each store with global customer information (such as those customers with CAUTION and NEGATIVE check verification status), thereby maximizing protection against bad checks while maintaining the local character of the store's customer database. Col. 33, lines 55-59. The check transaction processing system allows a store to build and maintain a customer database containing customer information useful for identifying new customers and developing customer profiles;

U.S. Pat. No 6,067, 525 claim 40	U.S. Pat. No 6,067,525 claim 40 with Court's claim construction	Deaton U.S. Pat. No. 5,201,010
A computer implemented sales system used to facilitate a sales process, the system comprising:	A computer implemented sales system used to facilitate a sales process, the system comprising:	The preamble is not a limitation, nonetheless abstract: "A method and system is disclosed for performing targeted marking on infrequent shoppers." Col. 3 lines 50-60: "Important aspects of the present invention are to facilitate check transactions by reducing the requirements for customer identification, to enable a store to adopt a risk management approach to check verification based on a customer's transactional history (frequency and dollar volume over specified intervals), and to improve a store's marketing and other customer relations programs by collecting transactional data for that store, both current and historical, that can be used to identify new or infrequent customers, develop customer profiles and to perform targeted marketing." Col. 9, lines 9-14: "A transaction terminal transmits a request (including a function code identifying the requested function together with other request data) to the transaction processor, which processes the request and returns an appropriate response."
a plurality of subsystems configured to electronically facilitate actions performed during the sales process; and	a plurality of [systems that are part of a larger system] configured to electronically facilitate actions performed during the sales process; and	Col. 4 lines 12-19: "The system includes one or more transaction terminals, coupled to a transaction processor that stores the customer database. A transaction terminal is used to transmit a customer information request (such as for check transaction verification), which includes an automatically read customer's check identification number, from the point of sale (POS) to the transaction processor."

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U.S. Pat. No 6,067, 525 claim 40	U.S. Pat. No 6,067,525 claim 40 with Court's claim construction	Deaton U.S. Pat. No. 5,201,010
an event manager coupled to the subsystems and configured to detect one or more changes in state characteristic of an event occurring in the system,	[hardware and/or software] coupled to the [systems that are part of a larger system] and configured to detect one or more [a change in a unique configuration of information within the system that is indicative of the occurrence of an event within the system occurring in the system,	Col. 4 lines 12-28: "The system includes one or more transaction terminals, coupled to a transaction processor that stores the customer database. A transaction terminal is used to transmit a customer information request (such as for check transaction verification), which includes an automatically read customer's check identification number, from the point of sale (POS) to the transaction processor. The transaction processor processes the customer information request, using the check identification number to search the customer database and retrieve the corresponding customer record, if any. Based on the customer information in the customer record, or the lack of a customer record, the transaction processor returns an appropriate response (such as check verification status) and marketing response information to the transaction terminal." Col. 9 lines 15-21: "For example, in the case of check verification, a transaction terminal is used to transmit a verification request-the customer's check ID, the verification function code, and the dollar amount. The transaction processor processes the request, updates the customer database to reflect that transaction, and returns a customer verification status response." Col. 31 lines 52-56: "Event-driven activities are performed automatically by the check transaction processing system to implement certain functions without operator intervention. The configuration and timing of these activities is a matter of routine design selection."
infer occurrence of the	[logical process by which	Col. 5, lines 19-27:

U.S. Pat. No 6,067, 525 claim 40	U.S. Pat. No 6,067,525 claim 40 with Court's claim construction	Deaton U.S. Pat. No. 5,201,010
event and a context in which the event occurred based at least in part on the detected changes in state,	**the fact that the event has occurred is derived by application of logical rules]** and **[logical process by which the fact that information already existing within the system that becomes relevant upon the occurrence of the event is derived by application of logical rules]** based at least in part on the detected changes in state; and	"Moreover, because the check transactional data is generated and maintained locally, it provides significant information about the store's customers over and above the information necessary for check verification risk management. New customers are readily identified, and frequency and dollar volume information may be used to establish customer profiles and to target advertising, marketing and promotional programs, and for other customer relations purposes." Col. 6, lines 10-24: "In addition to check verification status, the system collects and accumulates selected additional transactional data, including frequency and dollar amounts over specified intervals (such as Day/Week/Month/Quarter/Total) and other historical information such as departments shopped, products purchased and the like, thus allowing the store to adopt risk management approach to check verification tailored to the store's particular customer and financial situation by conditioning check authorization on meeting certain selected transactional limits regardless of customer status (the CALL MANAGER response), and allowing the store to develop customer profiles and to target advertising, marketing and promotions, and otherwise improve customer relations." Col. 65 line 59 – Col. 66 line 12: "The checking account identification number is entered into processor 110 which contain a database that maintains customer records including the customer's name and address, the checking account identification number, and customer shopping habits and transactional data over a preselected time interval. The checking account identification number is compared with the database. A response is generated by the processor 110 to signal the presence of the customer's checking account identification number or the failure to locate the customer's checking

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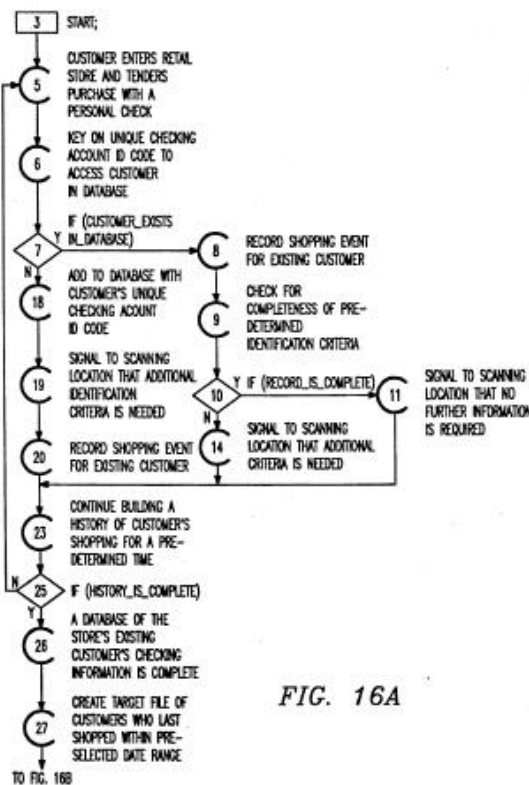| U.S. Pat. No 6,067, 525 claim 40	U.S. Pat. No 6,067,525 claim 40 with Court's claim construction	Deaton U.S. Pat. No. 5,201,010
		account identification number. A new record is then created in the database for that customer's checking account identification number in response to a processor 110 response indicating the failure to locate, so that the customer's name and address is entered into the record along with a shopping incidence and shopping data being recorded in the database concurrently. A list of customers is then generated in the database whose last transaction date is prior to a preselected interval of inactivity so that grouping or subgrouping of customers is available for marketing efforts." Col. 66 lines 13-19: "Alternatively, the system may use dollar amounts to determine an "infrequent shopper". If the system determines that the cumulative dollars spent at the store by a specified customer is equal to or less than a predetermined dollar level within a predetermined time interval, the specified customer is designated as an "infrequent shopper"." Col. 66 lines 20-30: "As another alternative, the database is maintained with the shopping history for each unique check identification. Each time the system detects a check with a unique check identification number, it is checked against the database. If the last date shopped is prior to a preselected date, a signal is generated and transmitted to the POS. The check is then marked or set aside to be used to create a mailing list. Alternatively, the signal may be used to prompt the store clerk to disburse incentive coupons at the POS." Col. 66, lines 32-38: "5.4. Marketing Based On Range Of Last Shopping Dates As noted above, it would be advantageous to be able to selectively

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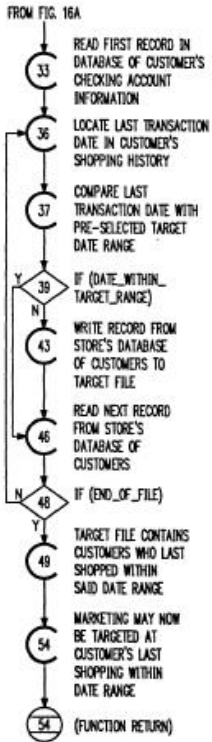| U.S. Pat. No 6,067, 525 claim 40	U.S. Pat. No 6,067,525 claim 40 with Court's claim construction	Deaton U.S. Pat. No. 5,201,010
		market to infrequent shoppers. FIG. 15 illustrated a database building technique to obtain a list of infrequent shoppers based upon their last shopping date.

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U.S. Pat. No 6,067,525 claim 40	U.S. Pat. No 6,067,525 claim 40 with Court's claim construction	Deaton U.S. Pat. No. 5,201,010

FIG. 15A

U.S. Pat. No 6,067, 525 claim 40	U.S. Pat. No 6,067,525 claim 40 with Court's claim construction	Deaton U.S. Pat. No. 5,201,010
		FIG. 15B Col. 66, lines 32-38: FIG. 16 illustrates a database building technique to provide a list of a store's customers whose last shopping date falls within a preselected

U.S. Pat. No 6,067, 525 claim 40	U.S. Pat. No 6,067,525 claim 40 with Court's claim construction	Deaton U.S. Pat. No. 5,201,010
		shopping date range. … In accordance with the techniques shown in FIG. 16, a customer's checking account identification number is entered as a unique customer identification code by the check reader 119. Host processor 110 is programmed to store a database which includes a plurality of unique customer identification codes and check cashing history of prior customers of the retail establishment, including date of check transactions. The processor then compares each newly entered unique customer identification code against the stored database. A signal is generated to indicate the presence of a complete customer information record or of an incomplete customer information record as a result of the comparison. A second database is then generated which lists customers whose last unique customer identification code entry date falls within a preselected date range. A promotion may then be selectively offered by the retail establishment to customers within the second database. For example, coupons or other enticements may be mailed directly to the customers on the second database, or distributed at the POS."

U.S. Pat. No 6,067, 525 claim 40	U.S. Pat. No 6,067,525 claim 40 with Court's claim construction	Deaton U.S. Pat. No. 5,201,010
		 FIG. 16A

U.S. Pat. No 6,067, 525 claim 40	U.S. Pat. No 6,067,525 claim 40 with Court's claim construction	Deaton U.S. Pat. No. 5,201,010
		FIG. 16B
link the inferred event with an action to be performed during the sales process based on prior sales experience	link the inferred event with an action to be performed during the sales process based on prior sales experience using the sales	Col. 66 line 9-12. A list of customers is then generated in the database whose last transaction date is prior to a preselected interval of inactivity so that grouping or subgrouping of customers is available for marketing efforts."

U.S. Pat. No 6,067, 525 claim 40	U.S. Pat. No 6,067,525 claim 40 with Court's claim construction	Deaton U.S. Pat. No. 5,201,010
using the sales system, and	system, and	Col. 66 lines 13-19: "Alternatively, the system may use dollar amounts to determine an "infrequent shopper". If the system determines that the cumulative dollars spent at the store by a specified customer is equal to or less than a predetermined dollar level within a predetermined time interval, the specified customer is designated as an "infrequent shopper"." Col. 66 lines 20-30: "As another alternative, the database is maintained with the shopping history for each unique check identification. Each time the system detects a check with a unique check identification number, it is checked against the database. If the last date shopped is prior to a preselected date, a signal is generated and transmitted to the POS. The check is then marked or set aside to be used to create a mailing list. Alternatively, the signal may be used to prompt the store clerk to disburse incentive coupons at the POS." Col. 66, lines 32-38: "5.4. Marketing Based On Range Of Last Shopping Dates As noted above, it would be advantageous to be able to selectively market to infrequent shoppers. FIG. 15 illustrated a database building technique to obtain a list of infrequent shoppers based upon their last shopping date. Col. 66, lines 32-38: FIG. 16 illustrates a database building technique to provide a list of a store's customers whose last shopping date falls within a preselected shopping date range. …

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U.S. Pat. No 6,067, 525 claim 40	U.S. Pat. No 6,067,525 claim 40 with Court's claim construction	Deaton U.S. Pat. No. 5,201,010
		In accordance with the techniques shown in FIG. 16, a customer's checking account identification number is entered as a unique customer identification code by the check reader 119. Host processor 110 is programmed to store a database which includes a plurality of unique customer identification codes and check cashing history of prior customers of the retail establishment, including date of check transactions. The processor then compares each newly entered unique customer identification code against the stored database. A signal is generated to indicate the presence of a complete customer information record or of an incomplete customer information record as a result of the comparison. A second database is then generated which lists customers whose last unique customer identification code entry date falls within a preselected date range. A promotion may then be selectively offered by the retail establishment to customers within the second database. For example, coupons or other enticements may be mailed directly to the customers on the second database, or distributed at the POS."
automatically initiate an operation using one or more of the plurality of subsystems to facilitate the action to be performed based on the inferred context.	automatically initiating an operation using one or more of the plurality of **[systems that are part of a larger system]** to facilitate the action to be performed based on the inferred context.	Col. 52 lines 31-39: "At the appropriate event time, the Event Manager Task spawns the event subtask, which receives (822) the current record from the Event Table. The current event record includes a current event time and an activity pointer to each of up to 10 associated activities identified in the Activity Table. The event subtask sequentially executes each activity associated with the current event time." Col. 52 lines 66-68: "For each activity code read from the Activity Table, the event subtask dispatches (830) to a corresponding activity routine for execution."

U.S. Pat. No 6,067, 525 claim 40	U.S. Pat. No 6,067,525 claim 40 with Court's claim construction	Deaton U.S. Pat. No. 5,201,010
		Col. 67 line 59 – Col. 68 line 12. FIG. 17 illustrates a program flow chart of a marketing technique utilizing the present invention, wherein coupons may be distributed to customers based upon the frequency of shopping, dollar volume or' other criteria based upon the shopping habits of the customer. … The technique shown in FIG. 17 enables the stores to issue coupons and other inducements to customers based upon the shopping habits of the customer. For example, the technique shown in FIG. 17 enables the store to reward a high volume shopper in order to hold on to especially good shoppers. Alternatively, the store can award a lesser incentive package to good shoppers in order to maintain a consistency such that each shopper receives a coupon package. Importantly, the technique enables a high incentive coupon pack to be delivered to a customer who is a secondary shopper or who is an infrequent shopper, in order to make them a primary shopper. Col. 70 lines 13-16. A … technique of distributing coupons utilizes a system to actually print, at the point of sale, coupons bearing the desired information based upon selected criteria. Col. 70 lines 30-34. [C]oupon dispensing apparatus … may be utilized to print the coupons as described in FIG. 16A-B, … based upon the criteria and the operation of the present invention.

U.S. Pat. No 6,067, 525 claim 40	U.S. Pat. No 6,067,525 claim 40 with Court's claim construction	Deaton U.S. Pat. No. 5,201,010
		FIG. 17A

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U.S. Pat. No 6,067, 525 claim 40	U.S. Pat. No 6,067,525 claim 40 with Court's claim construction	Deaton U.S. Pat. No. 5,201,010
		FIG. 17B

Col. 70 line 50 – Col. 71 line 21.

FIG. 18A-C illustrates a technique for generating coupons based upon the particular transaction currently being accomplished by the customer. The technique of FIG. 18 detects the particular store departments in which the products being purchased are located. … For example, the technique shown in FIG. III detects whether or not items have been purchased from the meat department, dairy department or deli. Based upon data stored within the computer, the decision is then made as to whether to award a

U.S. Pat. No 6,067, 525 claim 40	U.S. Pat. No 6,067,525 claim 40 with Court's claim construction	Deaton U.S. Pat. No. 5,201,010
		coupon and what type of coupon to award. For example, if the data illustrates that over a period of time a shopper shows a consistent failure to shop at the delicatessen, then when the customer's check identification is scanned into the check reader 119, the processor 110 pulls up the customer's history and generates a coupon to induce the customer to shop at the delicatessen the next time the customer shops. This inducing can be done by providing the customer with a very high value coupon used only for deli shopping. Similarly, the stored data in processor 110 may contain information regarding particular product groups. If it is determined that the customer is a frequent shopper but does not purchase coffee, the data may determine that a coupon providing a large discount on coffee would be suitable to give to the customer. Alternatively, the system might determine that the customer had no history of buying a specific brand of coffee, and incentive coupons can be distributed for that brand of coffee. To provide this information, information regarding the particular product and the department of the product is generated by the bar code reader 1130, or through entry through the cash register, and transmitted to the host processor 110. The host processor 110 then identifies each particular product being purchased, compares it against the stored data tables and generates an indication of the type of coupon to be given to the customer.

U.S. Pat. No 6,067, 525 claim 40	U.S. Pat. No 6,067,525 claim 40 with Court's claim construction	Deaton U.S. Pat. No. 5,201,010
		FIG. 18A

U.S. Pat. No 6,067, 525 claim 40	U.S. Pat. No 6,067,525 claim 40 with Court's claim construction	Deaton U.S. Pat. No. 5,201,010

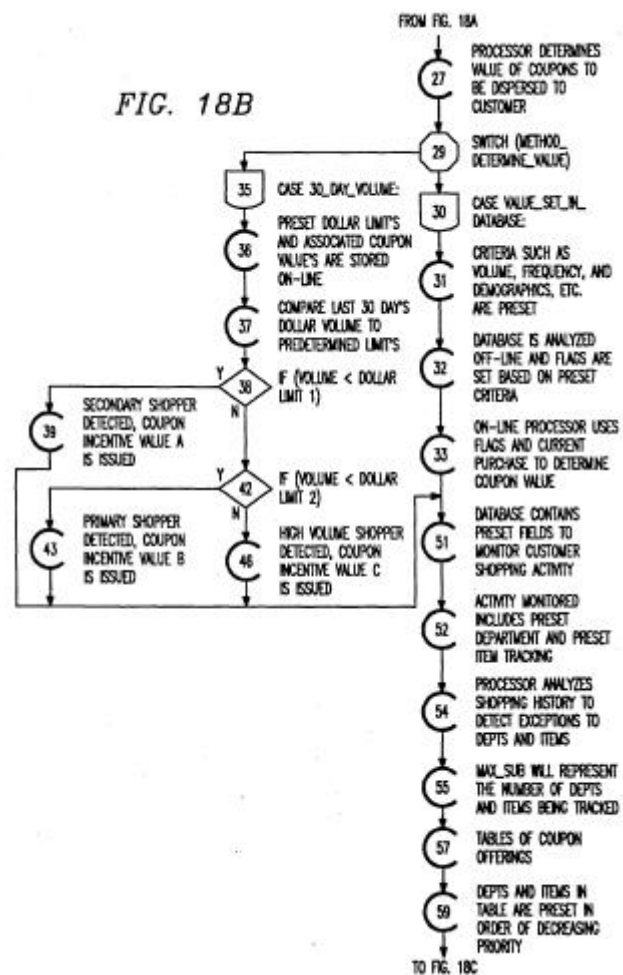| U.S. Pat. No 6,067, 525 claim 40	U.S. Pat. No 6,067,525 claim 40 with Court's claim construction	Deaton U.S. Pat. No. 5,201,010

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Cragun U.S. Pat. No. 5,774,868 anticipates asserted Claims 1-3, 5-8, 10, 12, 20, 24, 34, 35, 37 and 40

U.S. Pat. No 6,067,525 claim 1	U.S. Pat. No 6,067,525 claim 1 with Court's claim construction	Cragun U.S. Pat. No. 5,774,868
A computer implemented sales system used to facilitate a sales process, the system comprising:	A computer implemented sales system used to facilitate a sales process, the system comprising:	The preamble is not a limitation, nonetheless title and abstract: "An automated sales promotion selection system"
a plurality of subsystems configured to facilitate one or more actions performed during at least one phase of the sales process; and	a plurality of **[systems that are part of a larger system]** configured to facilitate one or more actions performed during at least one phase of the sales process; and	Billing Terminal 16, and Sales Promotion Output Device 17, Customer Information Device 14 (Fig.1). Fig. 1 shows an automatic sales promotion selection system 10, construction in accordance with the present invention, having a computer system 12 that communicates with one or more customer information devices 14 and billing terminals 16. (Col. 3, line 66-col. 4, line 3).

U.S. Pat. No 6,067,525 claim 1	U.S. Pat. No 6,067,525 claim 1 with Court's claim construction	Cragun U.S. Pat. No. 5,774,868

FIG. 1

Col. 2 lines 32-42.
The system includes a customer information device that receives customer data relating to customer purchases of items from an inventory of items, a central processing unit having a sales promotion neural network and a storage unit containing a plurality of item identifiers comprising potential customer purchases of additional items from the inventory, and an output device that receives the item identifiers of the likely purchases determined by the sales promotion neural network and produces a sales promotion relating to at least one of the item identifiers.

Col. 4 lines 1-3. |

U.S. Pat. No 6,067,525 claim 1	U.S. Pat. No 6,067,525 claim 1 with Court's claim construction	Cragun U.S. Pat. No. 5,774,868
		having a computer system 12 that communicates with <u>one or more customer information devices 14 and billing terminals 16</u>. Col. 4 lines 18-22. The missing items can then be the subject of a purchase suggestion, an automatically dispensed coupon, or other sales promotion indicated by an <u>output device</u> 17 such as a printer or display terminal. Col. 4 lines 28-35. The computer system 12 … includes a neural network <u>purchase advisor subsystem</u> 24 having neural networks that process purchase data as described further below. Col. 16 lines 58-62. the system of FIG. 1 preferably includes within the purchase advisor subsystem 24 a demographics prediction subsystem 25 that predicts the customer population that can be expected to be within the store at anyone time, based on a variety of factors.

U.S. Pat. No 6,067,525 claim 1	U.S. Pat. No 6,067,525 claim 1 with Court's claim construction	Cragun U.S. Pat. No. 5,774,868
an event manager, coupled to the subsystems, the event manager detecting one or more changes in state characteristic of an event occurring within the system	**[hardware and/or software]**, coupled to the **[systems that are part of a larger system]**, the **[hardware and/or software]** detecting one or more **[changes in a unique configuration of information within the system that is indicative of the occurrence of an event within the system]** occurring within the system,	Event Manager Computer system 12, Neural network purchase adviser subsystem 24, demographic prediction subsystem 25; Col. 4 lines 28-30. The computer system 12 operates under control of a main processor 18, also referred to as a central processing unit (CPU). Col. 4 lines 31-34. The CPU retrieves and stores data from a memory storage unit 22, which includes a neural network purchase advisor subsystem 24.

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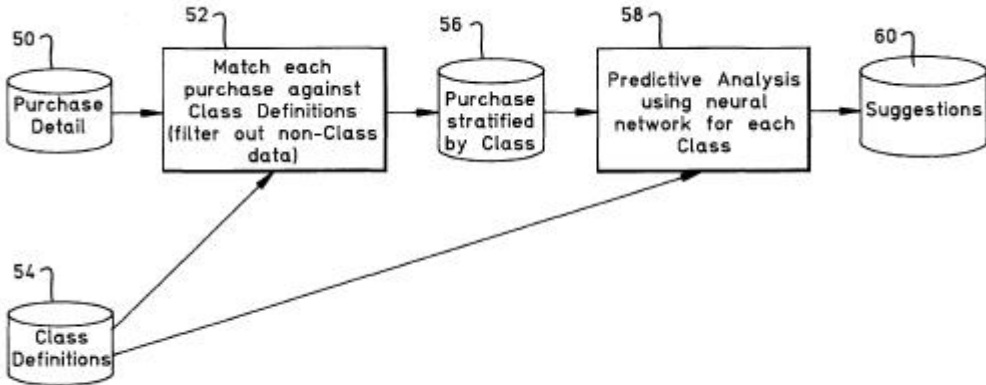| U.S. Pat. No 6,067,525 claim 1	U.S. Pat. No 6,067,525 claim 1 with Court's claim construction	Cragun U.S. Pat. No. 5,774,868
		Col. 4 lines 40-45. The customer information devices 14 and billing terminals 16 communicate with the computer system 12 using an input/output interface 32, which in turn is connected to a user interface 34 that communicates with the CPU 18. The sales output device 17 also is connected to the input/output interface. Col. 4 lines 55-57. As items are purchased in a store, the neural network purchase advisor subsystem is invoked under the control of the CPU 18. Col. 4 lines 59-62. Purchase details comprising purchase transaction data from a customer purchase are automatically stored into the memory 22 as a sales clerk registers the purchases. Col. 7 lines 49-57. FIG. 3 is a representation of the data structure 62 used by the computer system 12 of FIG. 1 in constructing the purchase data. The data structure is referred to as the purchase detail file. FIG. 3 shows that the purchase detail file 62 contains information fields including a purchase identification number 64, also referred to as a transaction number, the date of the purchase 66, the time of the purchase 68, a first item number 70 that identifies an item purchased during the store visit, and a pointer 72 to a next purchase data record 74. Sales made via telephone orders and/or in the telemarketing context can be used with the system. (col. 18, lines 16-20). The demographic prediction subsystem 25 predicts the customer population that

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U.S. Pat. No 6,067,525 claim 1	U.S. Pat. No 6,067,525 claim 1 with Court's claim construction	Cragun U.S. Pat. No. 5,774,868
		can be expected to be within the store at any one time based on a variety of factors. (Col. 16, lines 58-66).
inferring occurrence of the event and a context in which the event occurred based at least in part on the detected changes in state, and	**[logical process by which the fact that the event has occurred is derived by application of logical rules]** and **[logical process by which the fact that information already existing within the system that becomes relevant upon the occurrence of the event is derived by application of logical rules]** based at least in part on the detected changes in state, and	The computer system 12 analyzes the collected purchase transaction information for a customer to segment the items purchased into purchase classes that comprise groups of items ordinarily purchased together. Col. 4 lines 11-15. In this way, the sales promotion selection system 10 automatically collects purchase transaction data, analyzes the data relating to a particular customer purchase transaction, and uses neural networks to select a sales promotion calculated to result in additional purchases. Col. 4 lines 21-27. The purchase adviser 24 neural network automatically collects purchase transaction data, segments the purchase items of a particular customer purchase transaction into predetermined purchase classes that define groups of items ordinarily purchased together, and identifies items that belong to a purchase class but were missing from the purchase transaction. (Fig. 10, col. 11, line 36-col. 12, line 13; col. 18, lines 21-27). The demographic prediction subsystem 25 processes the collected data to generate output comprising a predicted customer population inside the store at a given time. The demographic subsystem processes the predicted customer population with another neural network of the subsystem to generate output comprising predicted purchases. That is, a listing of items that the subsystem predicts would be purchased by a typical customer at the given time. (Col. 17, lines 44-60).

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U.S. Pat. No 6,067,525 claim 1	U.S. Pat. No 6,067,525 claim 1 with Court's claim construction	Cragun U.S. Pat. No. 5,774,868
		FIG. 2 Col. 4 line 65 – Col. 5 line 12. purchase items listed in the purchase transaction data are compared against predetermined purchase class definitions. In this step, purchase items that have not been characterized as fitting into one of the predetermined purchase classes are filtered out of the purchase data. … The class definitions are obtained from the memory storage unit 22, as represented by the flow diagram box numbered 54. For each class containing items that match with one or more of the items purchased, a sublist is created by the CPU 18. … The CPU creates a list of the purchase items belonging to each class. This step is represented by the flow diagram box numbered 56. Col. 5 lines 29-35. Classes may include items that have a purchase relationship but that do not clearly fit into an aptly named category. Analysis of purchase information might be necessary to identify such classes. Each one of the classes comprises a list of

U.S. Pat. No 6,067,525 claim 1	U.S. Pat. No 6,067,525 claim 1 with Court's claim construction	Cragun U.S. Pat. No. 5,774,868
		purchase items that, based upon analysis of historical data, define items frequently purchased together. Col. 7 line 66 – Col. 8 line 1. FIG. 4 is a representation of the data structure 80 that defines the classes. The data structure is referred to as the class definition file. Col. 16 lines 62-66. The demographics prediction subsystem advantageously uses a customer population neural network that is designed to make predictions of the customers in the store and then to predict purchases that such a customer population would make. Col. 17 lines 5-37. FIG. 18 is a representation of a demographics data structure 303 used by the CPU 18 (FIG. 1) in running the customer population neural network of the demographics prediction subsystem. … The first data field illustrated in the data structure 302 is for the time of day 304. Time of day can be important in predicting customer populations because, for example, buyers with particular characteristics might shop early in the day as opposed to those who shop late in the day or late in the evening. The next data field is for the date 306. The date field permits the system to account for seasonal buying characteristics, holiday variations, and other buyer characteristics associated with the day of the week, month, or year. A weather data field 308 permits the system to further account for seasonal or other weather-related phenomenon. For example, rainy weather likely will result in a customer population favorably disposed to suggestions for purchases of rain gear such as boots, umbrellas, and overcoats, regardless of other purchases

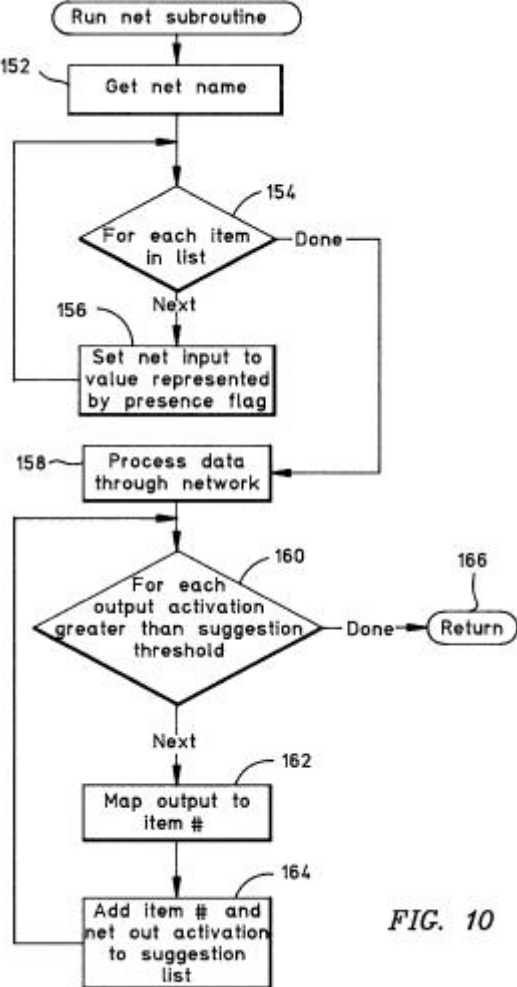| U.S. Pat. No 6,067,525 claim 1	U.S. Pat. No 6,067,525 claim 1 with Court's claim construction	Cragun U.S. Pat. No. 5,774,868
		made during a store purchase transaction. Another data field is one for customer data 310, which includes data relating to recent purchases by other customers, spending habits of the local population, economic data, and the like. The next data field is for buyer preference data 312, which comprises item identification numbers of products predicted to be purchased. Col. 17 lines 51-55. represented by the box numbered 324, is to process the collected data with the demographic neural network to generated output comprising a predicted customer population inside the store at a given time.
automatically initiating an operation in one or more particular subsystems of the computer to facilitate a new action based on the inferred context.	automatically initiating an operation in one or more particular **[systems that are part of a larger system]** of the computer to facilitate a new action based on the inferred context.	The demographic prediction subsystem 25 provides the predicted sales purchase data to the purchase advisor subsystem and its neural networks. The purchase advisor subsystem will segment the purchase items into purchase classes and generate selected sales promotions, such as purchase suggestions. The selected sales promotions can be used on the general customer population or for direct mail campaigns and the like, rather than the use described previously of targeting particular customers making purchases. The output comprising the predicted customer population in the store and the output comprising the predicted purchase transactions can be used independently of any use in the purchase advisor subsystem. It might be useful to a store manager to have a sense of customers that can be expected in a store at anyone time, or to have an understanding of what products can reasonably be expected to be purchased at a given time of day. (Col. 17, line 60-col. 18, line 15). Col. 5 lines 42-49. For each class, the purchase items that fit within the class are processed through the neural network for that class to predict missing items that ordinarily are purchased in a transaction at the same time as the purchase items, as represented

U.S. Pat. No 6,067,525 claim 1	U.S. Pat. No 6,067,525 claim 1 with Court's claim construction	Cragun U.S. Pat. No. 5,774,868
		by the flow diagram box numbered 58 in FIG. 2. These additional items are suggested to the customer for purchase, as indicated by the flow diagram box numbered 60.

U.S. Pat. No 6,067,525 claim 1	U.S. Pat. No 6,067,525 claim 1 with Court's claim construction	Cragun U.S. Pat. No. 5,774,868

FIG. 10

Col. 2, lines 56-59
The missing items can then be suggested by a sales clerk for purchase or can be |

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U.S. Pat. No 6,067,525 claim 1	U.S. Pat. No 6,067,525 claim 1 with Court's claim construction	Cragun U.S. Pat. No. 5,774,868
		the subject of an automatically produced promotion, such as a coupon that can be redeemed for a discounted purchase price. Col. 18, lines 27-29. The system then selects a sales promotion to suggest the purchase of a missing item that likely will result in an additional sale. Col. 17 lines 55-67. at box 326, the demographic subsystem processes the predicted customer population with another neural network of the subsystem to generate output comprising predicted purchases. That is, a listing of items that the subsystem predicts would be purchased by a typical customer at the given time. The next step, represented by the flow diagram box numbered 328, is to provide the predicted sales purchase data to the purchase advisor subsystem and its neural networks. As described above, the purchase advisor subsystem will segment the purchase items into purchase classes and generate selected sales promotions, such as purchase suggestions. Col. 18, line 2-6. The selected sales promotions can be used on the general customer population or for direct mail campaigns and the like, rather than the use described previously of targeting particular customers making purchases.

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U.S. Pat. No 6,067,525 claim 2	U.S. Pat. No 6,067,525 claim 2 with Court's claim construction	Cragun U.S. Pat. No. 5,774,868
A system as recited in claim 1,	A system as recited in claim 1,	[Claim 1 chart incorporated by reference]
wherein the inferred context includes information related to at least one phase of the sales process.	wherein the inferred **[information already existing within the system that becomes relevant upon the occurrence of an event]** includes information related to at least one phase of the sales process.	The computer system 12 analyzes the collected purchase transaction information for a customer to segment the items purchased into purchase classes that comprise groups of items ordinarily purchased together. Col. 4 lines 11-15. In this way, the sales promotion selection system 10 automatically collects purchase transaction data, analyzes the data relating to a particular customer purchase transaction, and uses neural networks to select a sales promotion calculated to result in additional purchases. Col. 4 lines 21-27.

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U.S. Pat. No 6,067,525 claim 3	U.S. Pat. No 6,067,525 claim 3 with Court's claim construction	Cragun U.S. Pat. No. 5,774,868
A system as recited in claim 1,	A system as recited in claim 1,	[Claim 1 chart incorporated by reference]
wherein the inferred context includes information related to whether a previous event has occurred in the sales process.	wherein the inferred **[information already existing within the system that becomes relevant upon the occurrence of an event]** includes information related to whether a previous event has occurred in the sales process.	The computer system 12 analyzes the collected purchase transaction information for a customer to segment the items purchased into purchase classes that comprise groups of items ordinarily purchased together. The system then uses neural networks to identify items that are missing from a purchase transaction that are members of a purchase class otherwise represented in the purchase transaction. The missing items can then be the subject of a purchase suggestion, an automatically dispensed coupon, or other sales promotion indicated by an output device 17 such as a printer or display terminal. In this way, the sales promotion selection system 10 automatically collects purchase transaction data, analyzes the data relating to a particular customer purchase transaction, and uses neural networks to select a sales promotion calculated to result in additional purchases. Col. 4 lines 11-27.

U.S. Pat. No 6,067,525 claim 5	U.S. Pat. No 6,067,525 claim 5 with Court's claim construction	Cragun U.S. Pat. No. 5,774,868
A system as recited in claim 1, wherein the plurality of subsystems comprises:	A system as recited in claim 1, wherein the plurality of **[systems that are parts of a larger system]** comprises:	[Claim 1 chart incorporated by reference]
a time with customer subsystem configured to convert a lead to a buying customer, so as to close a sale; and	a time with customer **[system that is part of a larger system]** configured to convert a lead to a buying customer, so as to close a sale; and	Billing Terminal 16, and Sales Promotion Output Device 17, Customer Information Device 14 (Fig.1). Fig. 1 shows an automatic sales promotion selection system 10, construction in accordance with the present invention, having a computer system 12 that communicates with one or more customer information devices 14 and billing terminals 16. (Col. 3, line 66-col. 4, line 3). Col. 2 lines 32-42. The system includes a <u>customer information device</u> that receives customer data relating to customer purchases of items from an inventory of items, a central processing unit having a sales promotion neural network and a storage unit containing a plurality of item identifiers comprising potential customer purchases of additional items from the inventory, and an output device that receives the item identifiers of the likely purchases determined by the sales promotion neural network and produces a sales promotion relating to at least one of the item identifiers. Col. 4 lines 1-3. having a computer system 12 that communicates with <u>one or more customer information devices 14 and billing terminals 16.</u>

U.S. Pat. No 6,067,525 claim 5	U.S. Pat. No 6,067,525 claim 5 with Court's claim construction	Cragun U.S. Pat. No. 5,774,868
		Col. 4 lines 18-22. The missing items can then be the subject of a purchase suggestion, an automatically dispensed coupon, or other sales promotion indicated by an <u>output device</u> 17 such as a printer or display terminal. Col. 4 lines 28-35. The computer system 12 … includes a neural network <u>purchase advisor subsystem</u> 24 having neural networks that process purchase data as described further below. Col. 16 lines 58-62. the system of FIG. 1 preferably includes within the purchase advisor subsystem 24 a demographics prediction subsystem 25 that predicts the customer population that can be expected to be within the store at anyone time, based on a variety of factors.
a lead generation subsystem configured to convert a name to a potential customer.	a lead generation **[system that is a part of a larger system]** configured to convert a name to a potential customer.	Billing Terminal 16, and Sales Promotion Output Device 17, Customer Information Device 14 (Fig.1). Fig. 1 shows an automatic sales promotion selection system 10, construction in accordance with the present invention, having a computer system 12 that communicates with one or more customer information devices 14 and billing terminals 16. (Col. 3, line 66-col. 4, line 3). Col. 2 lines 32-42. The system includes a <u>customer information device</u> that receives customer data relating to customer purchases of items from an inventory of items, a central processing unit having a sales promotion neural network and a storage unit containing a plurality of item

U.S. Pat. No 6,067,525 claim 5	U.S. Pat. No 6,067,525 claim 5 with Court's claim construction	Cragun U.S. Pat. No. 5,774,868
		identifiers comprising potential customer purchases of additional items from the inventory, and an output device that receives the item identifiers of the likely purchases determined by the sales promotion neural network and produces a sales promotion relating to at least one of the item identifiers. Col. 4 lines 1-3. having a computer system 12 that communicates with <u>one or more customer information devices 14 and billing terminals 16</u>. Col. 4 lines 18-22. The missing items can then be the subject of a purchase suggestion, an automatically dispensed coupon, or other sales promotion indicated by an <u>output device</u> 17 such as a printer or display terminal. Col. 4 lines 28-35. The computer system 12 … includes a neural network <u>purchase advisor subsystem</u> 24 having neural networks that process purchase data as described further below. Col. 16 lines 58-62. the system of FIG. 1 preferably includes within the purchase advisor subsystem 24 a demographics prediction subsystem 25 that predicts the customer population that can be expected to be within the store at anyone time, based on a variety of factors.

U.S. Pat. No 6,067,525 claim 6	U.S. Pat. No 6,067,525 claim 6 with Court's claim construction	Cragun U.S. Pat. No. 5,774,868
A system as recited in claim 1, wherein the plurality of subsystems comprises; [sic]	A system as recited in claim 1, wherein the plurality of **[systems that are parts of a larger system]** comprises; [sic]	[Claim 1 chart incorporated by reference]
a time with customer subsystem configured to convert a lead to a buying customer, so as to close a sale; and	a time with customer **[system that is part of a larger system]** configured to convert a lead to a buying customer, so as to close a sale; and	Billing Terminal 16, and Sales Promotion Output Device 17, Customer Information Device 14 (Fig.1). Fig. 1 shows an automatic sales promotion selection system 10, construction in accordance with the present invention, having a computer system 12 that communicates with one or more customer information devices 14 and billing terminals 16. (Col. 3, line 66-col. 4, line 3). Col. 2 lines 32-42. The system includes a <u>customer information device</u> that receives customer data relating to customer purchases of items from an inventory of items, a central processing unit having a sales promotion neural network and a storage unit containing a plurality of item identifiers comprising potential customer purchases of additional items from the inventory, and an output device that receives the item identifiers of the likely purchases determined by the sales promotion neural network and produces a sales promotion relating to at least one of the item identifiers. Col. 4 lines 1-3. having a computer system 12 that communicates with <u>one or more customer information devices 14 and billing terminals 16</u>.

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		Col. 4 lines 18-22. The missing items can then be the subject of a purchase suggestion, an automatically dispensed coupon, or other sales promotion indicated by an <u>output device</u> 17 such as a printer or display terminal. Col. 4 lines 28-35. The computer system 12 … includes a neural network <u>purchase advisor subsystem</u> 24 having neural networks that process purchase data as described further below. Col. 16 lines 58-62. the system of FIG. 1 preferably includes within the purchase advisor subsystem 24 a demographics prediction subsystem 25 that predicts the customer population that can be expected to be within the store at anyone time, based on a variety of factors.
an order management subsystem configured to convert the sale such that a product or service delivered matches a product or service sold.	an order management **[system that is part of a larger system]** configured to convert the sale such that a product or service delivered matches a product or service sold.	Billing Terminal 16, and Sales Promotion Output Device 17, Customer Information Device 14 (Fig.1). Fig. 1 shows an automatic sales promotion selection system 10, construction in accordance with the present invention, having a computer system 12 that communicates with one or more customer information devices 14 and billing terminals 16. (Col. 3, line 66-col. 4, line 3). Col. 2 lines 32-42. The system includes a <u>customer information device</u> that receives customer data relating to customer purchases of items from an inventory of items, a central processing unit having a sales promotion neural network and a storage unit containing a plurality of item identifiers comprising potential customer purchases of additional items from the inventory, and an output device that receives the item identifiers of the likely purchases determined by the sales promotion

| | | neural network and produces a sales promotion relating to at least one of the item identifiers.

Col. 4 lines 1-3.
having a computer system 12 that communicates with <u>one or more customer information devices 14 and billing terminals 16</u>.

Col. 4 lines 18-22.
The missing items can then be the subject of a purchase suggestion, an automatically dispensed coupon, or other sales promotion indicated by an <u>output device</u> 17 such as a printer or display terminal.

Col. 4 lines 28-35.
The computer system 12 … includes a neural network <u>purchase advisor subsystem</u> 24 having neural networks that process purchase data as described further below.

Col. 16 lines 58-62.
the system of FIG. 1 preferably includes within the purchase advisor subsystem 24 a demographics prediction subsystem 25 that predicts the customer population that can be expected to be within the store at anyone time, based on a variety of factors. |

U.S. Pat. No 6,067,525 claim 7	U.S. Pat. No 6,067,525 claim 7 with Court's claim construction	Cragun U.S. Pat. No. 5,774,868
A system as recited in claim 1, wherein the plurality of subsystems comprises:	A system as recited in claim 1, wherein the plurality of **[systems that are parts of a larger system]** comprises:	[Claim 1 chart incorporated by reference]
a time with customer subsystem configured to convert a lead to a buying customer, so as to close a sale; and	a time with customer **[system that is part of a larger system]** configured to convert a lead to a buying customer, so as to close a sale; and	Billing Terminal 16, and Sales Promotion Output Device 17, Customer Information Device 14 (Fig.1). Fig. 1 shows an automatic sales promotion selection system 10, construction in accordance with the present invention, having a computer system 12 that communicates with one or more customer information devices 14 and billing terminals 16. (Col. 3, line 66-col. 4, line 3). Col. 2 lines 32-42. The system includes a <u>customer information device</u> that receives customer data relating to customer purchases of items from an inventory of items, a central processing unit having a sales promotion neural network and a storage unit containing a plurality of item identifiers comprising potential customer purchases of additional items from the inventory, and an output device that receives the item identifiers of the likely purchases determined by the sales promotion neural network and produces a sales promotion relating to at least one of the item identifiers. Col. 4 lines 1-3. having a computer system 12 that communicates with <u>one or more customer information devices 14 and billing terminals 16</u>.

U.S. Pat. No 6,067,525 claim 7	U.S. Pat. No 6,067,525 claim 7 with Court's claim construction	Cragun U.S. Pat. No. 5,774,868
		Col. 4 lines 18-22. The missing items can then be the subject of a purchase suggestion, an automatically dispensed coupon, or other sales promotion indicated by an output device 17 such as a printer or display terminal. Col. 4 lines 28-35. The computer system 12 … includes a neural network purchase advisor subsystem 24 having neural networks that process purchase data as described further below. Col. 16 lines 58-62. the system of FIG. 1 preferably includes within the purchase advisor subsystem 24 a demographics prediction subsystem 25 that predicts the customer population that can be expected to be within the store at anyone time, based on a variety of factors.
a customer retention subsystem configured to convert an existing customer into a lead, so as to generate repeat sales.	a customer retention [system that is part of a larger system] configured to convert an existing customer into a lead, so as to generate repeat sales.	Billing Terminal 16, and Sales Promotion Output Device 17, Customer Information Device 14 (Fig.1). Fig. 1 shows an automatic sales promotion selection system 10, construction in accordance with the present invention, having a computer system 12 that communicates with one or more customer information devices 14 and billing terminals 16. (Col. 3, line 66-col. 4, line 3). Col. 2 lines 32-42. The system includes a customer information device that receives customer data relating to customer purchases of items from an inventory of items, a central processing unit having a sales promotion neural network and a storage unit containing a plurality of item

U.S. Pat. No 6,067,525 claim 7	U.S. Pat. No 6,067,525 claim 7 with Court's claim construction	Cragun U.S. Pat. No. 5,774,868
		identifiers comprising potential customer purchases of additional items from the inventory, and an output device that receives the item identifiers of the likely purchases determined by the sales promotion neural network and produces a sales promotion relating to at least one of the item identifiers. Col. 4 lines 1-3. having a computer system 12 that communicates with <u>one or more customer information devices 14 and billing terminals 16</u>. Col. 4 lines 18-22. The missing items can then be the subject of a purchase suggestion, an automatically dispensed coupon, or other sales promotion indicated by an <u>output device</u> 17 such as a printer or display terminal. Col. 4 lines 28-35. The computer system 12 … includes a neural network <u>purchase advisor subsystem</u> 24 having neural networks that process purchase data as described further below. Col. 16 lines 58-62. the system of FIG. 1 preferably includes within the purchase advisor subsystem 24 a demographics prediction subsystem 25 that predicts the customer population that can be expected to be within the store at anyone time, based on a variety of factors.

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U.S. Pat. No 6,067,525 claim 8	U.S. Pat. No 6,067,525 claim 8 with Court's claim construction	Cragun U.S. Pat. No. 5,774,868
A system as recited in claim 1, wherein the plurality of subsystems comprises:	A system as recited in claim 1, wherein the plurality of **[systems that are parts of a larger system]** comprises:	[Claim 1 chart incorporated by reference]
a time with customer subsystem configured to convert a lead to a buying customer and prompting the buying customer to make a buying decision, so as to close a sale; and	a time with customer **[system that is part of a larger system]** configured to convert a lead to a buying customer and prompting the buying customer to make a buying decision, so as to close a sale; and	Billing Terminal 16, and Sales Promotion Output Device 17, Customer Information Device 14 (Fig.1). Fig. 1 shows an automatic sales promotion selection system 10, construction in accordance with the present invention, having a computer system 12 that communicates with one or more customer information devices 14 and billing terminals 16. (Col. 3, line 66-col. 4, line 3). Col. 2 lines 32-42. The system includes a <u>customer information device</u> that receives customer data relating to customer purchases of items from an inventory of items, a central processing unit having a sales promotion neural network and a storage unit containing a plurality of item identifiers comprising potential customer purchases of additional items from the inventory, and an output device that receives the item identifiers of the likely purchases determined by the sales promotion neural network and produces a sales promotion relating to at least one of the item identifiers. Col. 4 lines 1-3. having a computer system 12 that communicates with <u>one or more customer information devices 14 and billing terminals 16.</u>

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U.S. Pat. No 6,067,525 claim 8	U.S. Pat. No 6,067,525 claim 8 with Court's claim construction	Cragun U.S. Pat. No. 5,774,868
		Col. 4 lines 18-22. The missing items can then be the subject of a purchase suggestion, an automatically dispensed coupon, or other sales promotion indicated by an output device 17 such as a printer or display terminal. Col. 4 lines 28-35. The computer system 12 … includes a neural network purchase advisor subsystem 24 having neural networks that process purchase data as described further below. Col. 16 lines 58-62. the system of FIG. 1 preferably includes within the purchase advisor subsystem 24 a demographics prediction subsystem 25 that predicts the customer population that can be expected to be within the store at anyone time, based on a variety of factors.
a self management subsystem configured to assist a salesperson in managing sales information.	a self management [system that is part of a larger system] configured to assist a salesperson in managing sales information.	Billing Terminal 16, and Sales Promotion Output Device 17, Customer Information Device 14 (Fig.1). Fig. 1 shows an automatic sales promotion selection system 10, construction in accordance with the present invention, having a computer system 12 that communicates with one or more customer information devices 14 and billing terminals 16. (Col. 3, line 66-col. 4, line 3). Col. 2 lines 32-42. The system includes a customer information device that receives customer data relating to customer purchases of items from an inventory of items, a central processing unit having a sales promotion neural network and a storage unit containing a plurality of item

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U.S. Pat. No 6,067,525 claim 8	U.S. Pat. No 6,067,525 claim 8 with Court's claim construction	Cragun U.S. Pat. No. 5,774,868
		identifiers comprising potential customer purchases of additional items from the inventory, and an output device that receives the item identifiers of the likely purchases determined by the sales promotion neural network and produces a sales promotion relating to at least one of the item identifiers. Col. 4 lines 1-3. having a computer system 12 that communicates with <u>one or more customer information devices 14 and billing terminals 16</u>. Col. 4 lines 18-22. The missing items can then be the subject of a purchase suggestion, an automatically dispensed coupon, or other sales promotion indicated by an <u>output device</u> 17 such as a printer or display terminal. Col. 4 lines 28-35. The computer system 12 … includes a neural network <u>purchase advisor subsystem</u> 24 having neural networks that process purchase data as described further below. Col. 16 lines 58-62. the system of FIG. 1 preferably includes within the purchase advisor subsystem 24 a demographics prediction subsystem 25 that predicts the customer population that can be expected to be within the store at anyone time, based on a variety of factors.

U.S. Pat. No 6,067,525 claim 10	U.S. Pat. No 6,067,525 claim 10 with Court's claim construction	Cragun U.S. Pat. No. 5,774,868
A system as recited in claim 1, wherein the plurality of subsystems comprises:	A system as recited in claim 1, wherein the plurality of **[systems that are parts of a larger system]** comprises:	[Claim 1 chart incorporated by reference]
a time with customer subsystem configured to convert a lead to a buying customer, so as to close a sale; and	a time with customer **[system that is part of a larger system]** configured to convert a lead to a buying customer, so as to close a sale; and	Billing Terminal 16, and Sales Promotion Output Device 17, Customer Information Device 14 (Fig.1). Fig. 1 shows an automatic sales promotion selection system 10, construction in accordance with the present invention, having a computer system 12 that communicates with one or more customer information devices 14 and billing terminals 16. (Col. 3, line 66-col. 4, line 3). Col. 2 lines 32-42. The system includes a <u>customer information device</u> that receives customer data relating to customer purchases of items from an inventory of items, a central processing unit having a sales promotion neural network and a storage unit containing a plurality of item identifiers comprising potential customer purchases of additional items from the inventory, and an output device that receives the item identifiers of the likely purchases determined by the sales promotion neural network and produces a sales promotion relating to at least one of the item identifiers. Col. 4 lines 1-3. having a computer system 12 that communicates with <u>one or more customer information devices 14 and billing terminals 16.</u>

U.S. Pat. No 6,067,525 claim 10	U.S. Pat. No 6,067,525 claim 10 with Court's claim construction	Cragun U.S. Pat. No. 5,774,868
		Col. 4 lines 18-22. The missing items can then be the subject of a purchase suggestion, an automatically dispensed coupon, or other sales promotion indicated by an <u>output device</u> 17 such as a printer or display terminal. Col. 4 lines 28-35. The computer system 12 … includes a neural network <u>purchase advisor subsystem</u> 24 having neural networks that process purchase data as described further below. Col. 16 lines 58-62. the system of FIG. 1 preferably includes within the purchase advisor subsystem 24 a demographics prediction subsystem 25 that predicts the customer population that can be expected to be within the store at anyone time, based on a variety of factors.
a sales management subsystem configured to assist a sales manager in managing a plurality of salespeople.	a sales management **[system that is part of a larger system]** configured to assist a sales manager in managing a plurality of salespeople.	Billing Terminal 16, and Sales Promotion Output Device 17, Customer Information Device 14 (Fig.1). Fig. 1 shows an automatic sales promotion selection system 10, construction in accordance with the present invention, having a computer system 12 that communicates with one or more customer information devices 14 and billing terminals 16. (Col. 3, line 66-col. 4, line 3). Col. 2 lines 32-42. The system includes a <u>customer information device</u> that receives customer data relating to customer purchases of items from an inventory of items, a central processing unit having a sales promotion neural network and a storage unit containing a plurality of item

U.S. Pat. No 6,067,525 claim 10	U.S. Pat. No 6,067,525 claim 10 with Court's claim construction	Cragun U.S. Pat. No. 5,774,868
		identifiers comprising potential customer purchases of additional items from the inventory, and an output device that receives the item identifiers of the likely purchases determined by the sales promotion neural network and produces a sales promotion relating to at least one of the item identifiers. Col. 4 lines 1-3. having a computer system 12 that communicates with <u>one or more customer information devices 14 and billing terminals 16</u>. Col. 4 lines 18-22. The missing items can then be the subject of a purchase suggestion, an automatically dispensed coupon, or other sales promotion indicated by an <u>output device</u> 17 such as a printer or display terminal. Col. 4 lines 28-35. The computer system 12 … includes a neural network <u>purchase advisor subsystem</u> 24 having neural networks that process purchase data as described further below. Col. 16 lines 58-62. the system of FIG. 1 preferably includes within the purchase advisor subsystem 24 a demographics prediction subsystem 25 that predicts the customer population that can be expected to be within the store at anyone time, based on a variety of factors.

U.S. Pat. No 6,067,525 claim 12	U.S. Pat. No 6,067,525 claim 12 with Court's claim construction	Cragun U.S. Pat. No. 5,774,868
A system as recited in claim 1, wherein the plurality of subsystems comprises:	A system as recited in claim 1, wherein the plurality of **[systems that are parts of a larger system]** comprises:	[Claim 1 chart incorporated by reference]
a lead management subsystem configured to manage a conversion of a lead to a prospect and of the prospect to a buying customer, and	a lead management **[system that is part of a larger system]** configured to manage a conversion of a lead to a prospect and of the prospect to a buying customer, and	Billing Terminal 16, and Sales Promotion Output Device 17, Customer Information Device 14 (Fig.1). Fig. 1 shows an automatic sales promotion selection system 10, construction in accordance with the present invention, having a computer system 12 that communicates with one or more customer information devices 14 and billing terminals 16. (Col. 3, line 66-col. 4, line 3). Col. 2 lines 32-42. The system includes a <u>customer information device</u> that receives customer data relating to customer purchases of items from an inventory of items, a central processing unit having a sales promotion neural network and a storage unit containing a plurality of item identifiers comprising potential customer purchases of additional items from the inventory, and an output device that receives the item identifiers of the likely purchases determined by the sales promotion neural network and produces a sales promotion relating to at least one of the item identifiers. Col. 4 lines 1-3. having a computer system 12 that communicates with <u>one or more customer information devices 14 and billing terminals 16.</u>

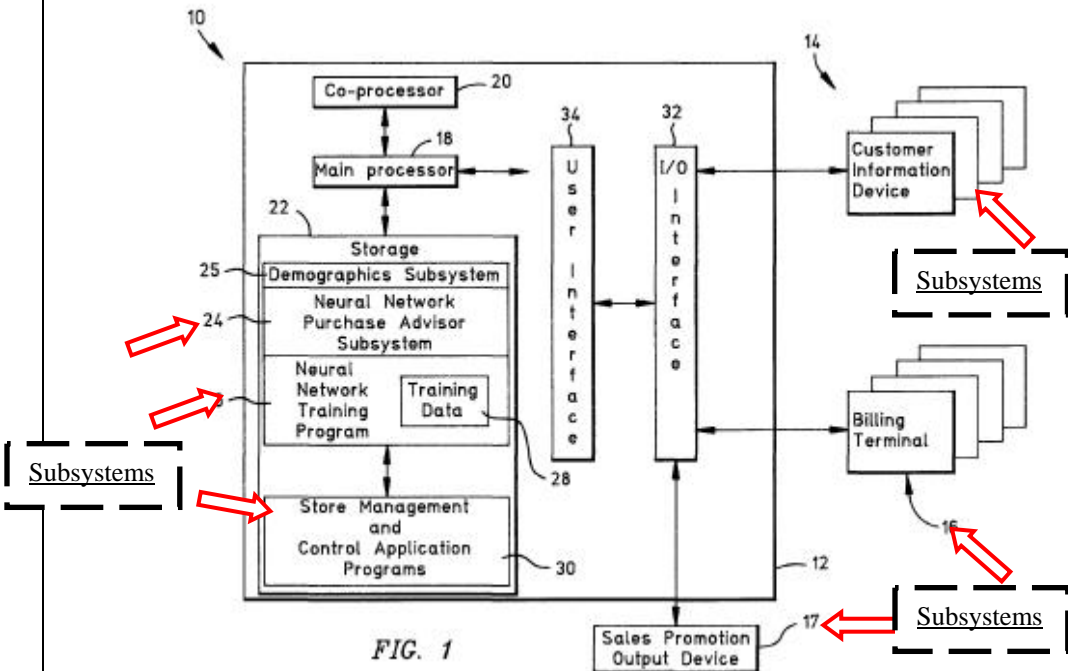| U.S. Pat. No 6,067,525 claim 12	U.S. Pat. No 6,067,525 claim 12 with Court's claim construction	Cragun U.S. Pat. No. 5,774,868
		Col. 4 lines 18-22. The missing items can then be the subject of a purchase suggestion, an automatically dispensed coupon, or other sales promotion indicated by an <u>output device</u> 17 such as a printer or display terminal. Col. 4 lines 28-35. The computer system 12 … includes a neural network <u>purchase advisor subsystem</u> 24 having neural networks that process purchase data as described further below. Col. 16 lines 58-62. the system of FIG. 1 preferably includes within the purchase advisor subsystem 24 a demographics prediction subsystem 25 that predicts the customer population that can be expected to be within the store at anyone time, based on a variety of factors.
a self management subsystem configured to assist a salesperson in managing sales information.	a self management **[system that is part of a larger system]** configured to assist a salesperson in managing sales information.	Billing Terminal 16, and Sales Promotion Output Device 17, Customer Information Device 14 (Fig.1). Fig. 1 shows an automatic sales promotion selection system 10, construction in accordance with the present invention, having a computer system 12 that communicates with one or more customer information devices 14 and billing terminals 16. (Col. 3, line 66-col. 4, line 3). Col. 2 lines 32-42. The system includes a <u>customer information device</u> that receives customer data relating to customer purchases of items from an inventory of items, a central processing unit having a sales promotion neural network and a storage unit containing a plurality of item

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U.S. Pat. No 6,067,525 claim 12	U.S. Pat. No 6,067,525 claim 12 with Court's claim construction	Cragun U.S. Pat. No. 5,774,868
		identifiers comprising potential customer purchases of additional items from the inventory, and an output device that receives the item identifiers of the likely purchases determined by the sales promotion neural network and produces a sales promotion relating to at least one of the item identifiers.

Col. 4 lines 1-3.
having a computer system 12 that communicates with <u>one or more customer information devices 14 and billing terminals 16</u>.

Col. 4 lines 18-22.
The missing items can then be the subject of a purchase suggestion, an automatically dispensed coupon, or other sales promotion indicated by an <u>output device</u> 17 such as a printer or display terminal.

Col. 4 lines 28-35.
The computer system 12 … includes a neural network <u>purchase advisor subsystem</u> 24 having neural networks that process purchase data as described further below.

Col. 16 lines 58-62.
the system of FIG. 1 preferably includes within the purchase advisor subsystem 24 a demographics prediction subsystem 25 that predicts the customer population that can be expected to be within the store at anyone time, based on a variety of factors.

Col. 13, lines 40 -47.

FIG. 14 illustrates the processing carried out in updating class descriptions and retraining the purchase advisor neural network and the |

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U.S. Pat. No 6,067,525 claim 12	U.S. Pat. No 6,067,525 claim 12 with Court's claim construction	Cragun U.S. Pat. No. 5,774,868
		neural network for each class. Such updating is carried out based upon the purchase information that has occurred since the time of the last update processing or some other predetermined time interval, such as monthly or according to shopping seasons.

U.S. Pat. No 6,067,525 claim 20	U.S. Pat. No 6,067,525 claim 20 with Court's claim construction	Cragun U.S. Pat. No. 5,774,868
A method of facilitating a sales process using a computer arrangement having a plurality of subsystems configured to facilitate one or more actions performed during at least one phase of the sales process, the method comprising the steps of:	A method of facilitating a sales process using a computer arrangement having a plurality of **[systems that are part of a larger system]** configured to facilitate one or more actions performed during at least one phase of the sales process, the method comprising the steps of:	The preamble is not a limitation, nonetheless title and abstract: "An automated sales promotion selection system" Billing Terminal 16, and Sales Promotion Output Device 17, Customer Information Device 14 (Fig.1). Fig. 1 shows an automatic sales promotion selection system 10, construction in accordance with the present invention, having a computer system 12 that communicates with one or more customer information devices 14 and billing terminals 16. (Col. 3, line 66-col. 4, line 3).

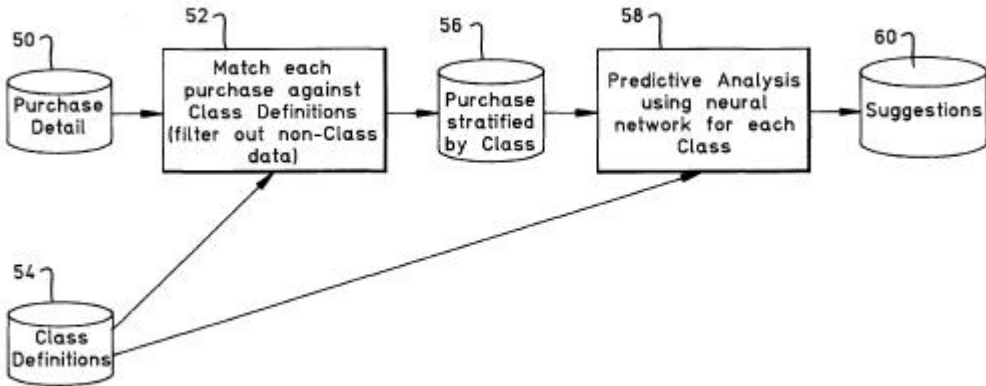| U.S. Pat. No 6,067,525 claim 20	U.S. Pat. No 6,067,525 claim 20 with Court's claim construction	Cragun U.S. Pat. No. 5,774,868
		  FIG. 1 Col. 2 lines 32-42. The system includes a <u>customer information device</u> that receives customer data relating to customer purchases of items from an inventory of items, a central processing unit having a sales promotion neural network and a storage unit containing a plurality of item identifiers comprising potential customer purchases of additional items from the inventory, and an output device that receives the item identifiers of the likely purchases determined by the sales promotion neural network and produces a sales promotion relating to at least one of the item identifiers. Col. 4 lines 1-3.

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U.S. Pat. No 6,067,525 claim 20	U.S. Pat. No 6,067,525 claim 20 with Court's claim construction	Cragun U.S. Pat. No. 5,774,868
		having a computer system 12 that communicates with <u>one or more customer information devices 14 and billing terminals 16</u>. Col. 4 lines 18-22. The missing items can then be the subject of a purchase suggestion, an automatically dispensed coupon, or other sales promotion indicated by an <u>output device</u> 17 such as a printer or display terminal. Col. 4 lines 28-35. The computer system 12 … includes a neural network <u>purchase advisor subsystem</u> 24 having neural networks that process purchase data as described further below. Col. 16 lines 58-62. the system of FIG. 1 preferably includes within the purchase advisor subsystem 24 a demographics prediction subsystem 25 that predicts the customer population that can be expected to be within the store at anyone time, based on a variety of factors.
automatically detecting one or more changes in state characteristic of an event occurring in the sales process;	automatically detecting one or more **[changes in a unique configuration of information within the system that is indicative of the occurrence of an event within the system]** occurring in the sales process;	Col. 4 lines 40-45. The customer information devices 14 and billing terminals 16 communicate with the computer system 12 using an input/output interface 32, which in turn is connected to a user interface 34 that communicates with the CPU 18. The sales output device 17 also is connected to the input/output interface. Col. 4 lines 55-57. As items are purchased in a store, the neural network purchase advisor subsystem is invoked under the control of the CPU 18. Col. 4 lines 59-62. Purchase details comprising purchase transaction data from a customer purchase

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U.S. Pat. No 6,067,525 claim 20	U.S. Pat. No 6,067,525 claim 20 with Court's claim construction	Cragun U.S. Pat. No. 5,774,868
		are automatically stored into the memory 22 as a sales clerk registers the purchases. Col. 7 lines 49-57. FIG. 3 is a representation of the data structure 62 used by the computer system 12 of FIG. 1 in constructing the purchase data. The data structure is referred to as the purchase detail file. FIG. 3 shows that the purchase detail file 62 contains information fields including a purchase identification number 64, also referred to as a transaction number, the date of the purchase 66, the time of the purchase 68, a first item number 70 that identifies an item purchased during the store visit, and a pointer 72 to a next purchase data record 74. Sales made via telephone orders and/or in the telemarketing context can be used with the system. (col. 18, lines 16-20). The demographic prediction subsystem 25 predicts the customer population that can be expected to be within the store at any one time based on a variety of factors. (Col. 16, lines 58-66).
inferring occurrence of the event and a context in which the event occurred based at least in part on the detected changes in state; and	[logical process by which the fact that the event has occurred is derived by application of logical rules] and [logical process by which the fact that information already existing within the	The computer system 12 analyzes the collected purchase transaction information for a customer to segment the items purchased into purchase classes that comprise groups of items ordinarily purchased together. Col. 4 lines 11-15. In this way, the sales promotion selection system 10 automatically collects purchase transaction data, analyzes the data relating to a particular customer purchase transaction, and uses neural networks to select a sales promotion calculated to result in additional purchases. Col. 4 lines 21-27.

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U.S. Pat. No 6,067,525 claim 20	U.S. Pat. No 6,067,525 claim 20 with Court's claim construction	Cragun U.S. Pat. No. 5,774,868
	system that becomes relevant upon the occurrence of the event is derived by application of logical rules] based at least in part on the detected changes in state; and	The purchase adviser 24 neural network automatically collects purchase transaction data, segments the purchase items of a particular customer purchase transaction into predetermined purchase classes that define groups of items ordinarily purchased together, and identifies items that belong to a purchase class but were missing from the purchase transaction. (Fig. 10, col. 11, line 36-col. 12, line 13; col. 18, lines 21-27). The demographic prediction subsystem 25 processes the collected data to generate output comprising a predicted customer population inside the store at a given time. The demographic subsystem processes the predicted customer population with another neural network of the subsystem to generate output comprising predicted purchases. That is, a listing of items that the subsystem predicts would be purchased by a typical customer at the given time. (Col. 17, lines 44-60). FIG. 2

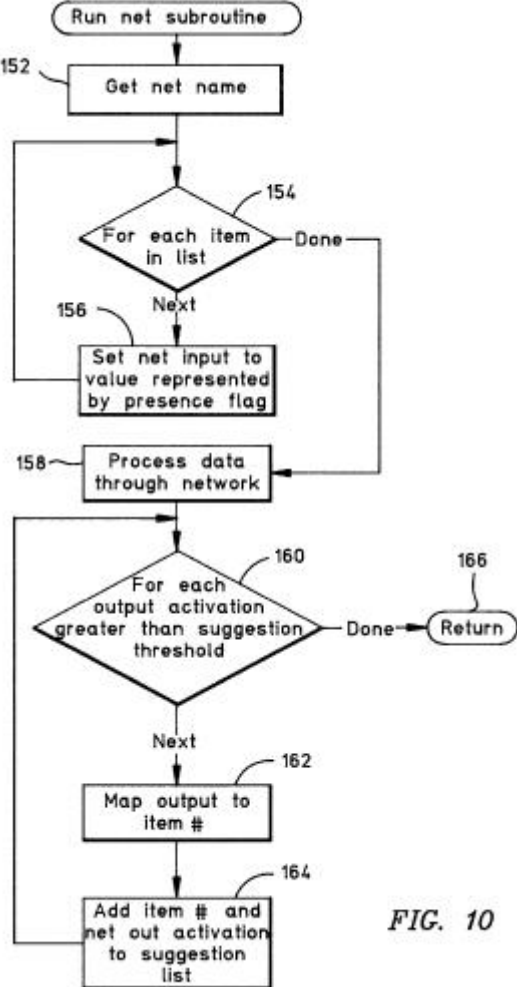| U.S. Pat. No 6,067,525 claim 20	U.S. Pat. No 6,067,525 claim 20 with Court's claim construction	Cragun U.S. Pat. No. 5,774,868
		Col. 4 line 65 – Col. 5 line 12. purchase items listed in the purchase transaction data are compared against predetermined purchase class definitions. In this step, purchase items that have not been characterized as fitting into one of the predetermined purchase classes are filtered out of the purchase data. … The class definitions are obtained from the memory storage unit 22, as represented by the flow diagram box numbered 54. For each class containing items that match with one or more of the items purchased, a sublist is created by the CPU 18. … The CPU creates a list of the purchase items belonging to each class. This step is represented by the flow diagram box numbered 56. Col. 5 lines 29-35. Classes may include items that have a purchase relationship but that do not clearly fit into an aptly named category. Analysis of purchase information might be necessary to identify such classes. Each one of the classes comprises a list of purchase items that, based upon analysis of historical data, define items frequently purchased together. Col. 7 line 66 – Col. 8 line 1. FIG. 4 is a representation of the data structure 80 that defines the classes. The data structure is referred to as the class definition file. Col. 16 lines 62-66. The demographics prediction subsystem advantageously uses a customer population neural network that is designed to make predictions of the customers in the store and then to predict purchases that such a customer population would make.

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U.S. Pat. No 6,067,525 claim 20	U.S. Pat. No 6,067,525 claim 20 with Court's claim construction	Cragun U.S. Pat. No. 5,774,868
		Col. 17 lines 5-37. FIG. 18 is a representation of a demographics data structure 303 used by the CPU 18 (FIG. 1) in running the customer population neural network of the demographics prediction subsystem. … The first data field illustrated in the data structure 302 is for the time of day 304. Time of day can be important in predicting customer populations because, for example, buyers with particular characteristics might shop early in the day as opposed to those who shop late in the day or late in the evening. The next data field is for the date 306. The date field permits the system to account for seasonal buying characteristics, holiday variations, and other buyer characteristics associated with the day of the week, month, or year. A weather data field 308 permits the system to further account for seasonal or other weather-related phenomenon. For example, rainy weather likely will result in a customer population favorably disposed to suggestions for purchases of rain gear such as boots, umbrellas, and overcoats, regardless of other purchases made during a store purchase transaction. Another data field is one for customer data 310, which includes data relating to recent purchases by other customers, spending habits of the local population, economic data, and the like. The next data field is for buyer preference data 312, which comprises item identification numbers of products predicted to be purchased. Col. 17 lines 51-55. represented by the box numbered 324, is to process the collected data with the demographic neural network to generated output comprising a predicted customer population inside the store at a given time.
automatically initiating an operation in one or more particular	automatically initiating an operation in one or more particular [systems	The demographic prediction subsystem 25 provides the predicted sales purchase data to the purchase advisor subsystem and its neural networks. The purchase advisor subsystem will segment the purchase items into purchase

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U.S. Pat. No 6,067,525 claim 20	U.S. Pat. No 6,067,525 claim 20 with Court's claim construction	Cragun U.S. Pat. No. 5,774,868
subsystems of the computer to facilitate a new action based on the inferred context.	**that are part of a larger system]** of the computer to facilitate a new action based on the inferred context.	classes and generate selected sales promotions, such as purchase suggestions. The selected sales promotions can be used on the general customer population or for direct mail campaigns and the like, rather than the use described previously of targeting particular customers making purchases. The output comprising the predicted customer population in the store and the output comprising the predicted purchase transactions can be used independently of any use in the purchase advisor subsystem. It might be useful to a store manager to have a sense of customers that can be expected in a store at anyone time, or to have an understanding of what products can reasonably be expected to be purchased at a given time of day. (Col. 17, line 60-col. 18, line 15). Col. 5 lines 42-49. For each class, the purchase items that fit within the class are processed through the neural network for that class to predict missing items that ordinarily are purchased in a transaction at the same time as the purchase items, as represented by the flow diagram box numbered 58 in FIG. 2. These additional items are suggested to the customer for purchase, as indicated by the flow diagram box numbered 60.

U.S. Pat. No 6,067,525 claim 20	U.S. Pat. No 6,067,525 claim 20 with Court's claim construction	Cragun U.S. Pat. No. 5,774,868
		Col. 2, lines 56-59 The missing items can then be suggested by a sales clerk for purchase or can be

FIG. 10

U.S. Pat. No 6,067,525 claim 20	U.S. Pat. No 6,067,525 claim 20 with Court's claim construction	Cragun U.S. Pat. No. 5,774,868
		the subject of an automatically produced promotion, such as a coupon that can be redeemed for a discounted purchase price. Col. 18, lines 27-29. The system then selects a sales promotion to suggest the purchase of a missing item that likely will result in an additional sale. Col. 17 lines 55-67. at box 326, the demographic subsystem processes the predicted customer population with another neural network of the subsystem to generate output comprising predicted purchases. That is, a listing of items that the subsystem predicts would be purchased by a typical customer at the given time. The next step, represented by the flow diagram box numbered 328, is to provide the predicted sales purchase data to the purchase advisor subsystem and its neural networks. As described above, the purchase advisor subsystem will segment the purchase items into purchase classes and generate selected sales promotions, such as purchase suggestions. Col. 18, line 2-6. The selected sales promotions can be used on the general customer population or for direct mail campaigns and the like, rather than the use described previously of targeting particular customers making purchases.

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U.S. Pat. No 6,067, 525 claim 24	U.S. Pat. No 6,067,525 claim 24 with Court's claim construction	Cragun U.S. Pat. No. 5,774,868
A method as recited in claim 20,	A method as recited in claim 20,	[Claim 20 chart incorporated by reference]
wherein the inferred context includes information related to at least one phase of the sales process.	wherein the inferred **[information already existing within the system that becomes relevant upon the occurrence of an event]** includes information related to at least one phase of the sales process.	The computer system 12 analyzes the collected purchase transaction information for a customer to segment the items purchased into purchase classes that comprise groups of items ordinarily purchased together. The system then uses neural networks to identify items that are missing from a purchase transaction that are members of a purchase class otherwise represented in the purchase transaction. The missing items can then be the subject of a purchase suggestion, an automatically dispensed coupon, or other sales promotion indicated by an output device 17 such as a printer or display terminal. In this way, the sales promotion selection system 10 automatically collects purchase transaction data, analyzes the data relating to a particular customer purchase transaction, and uses neural networks to select a sales promotion calculated to result in additional purchases. Col. 4 lines 11-27.

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U.S. Pat. No 6,067, 525 claim 34	U.S. Pat. No 6,067,525 claim 34 with Court's claim construction	Cragun U.S. Pat. No. 5,774,868
A method as recited in claim 20, further comprising the steps of:	A method as recited in claim 20, further comprising the steps of:	[Claim 20 chart incorporated by reference]
inferring occurrence of an event while converting a lead to a buying customer; and	**[logical process by which the fact that the event has occurred is derived by application of logical rules]** while converting a lead to a buying customer; and	Billing Terminal 16, and Sales Promotion Output Device 17, Customer Information Device 14 (Fig.1). Fig. 1 shows an automatic sales promotion selection system 10, construction in accordance with the present invention, having a computer system 12 that communicates with one or more customer information devices 14 and billing terminals 16. (Col. 3, line 66-col. 4, line 3). Col. 2 lines 32-42. The system includes a <u>customer information device</u> that receives customer data relating to customer purchases of items from an inventory of items, a central processing unit having a sales promotion neural network and a storage unit containing a plurality of item identifiers comprising potential customer purchases of additional items from the inventory, and an output device that receives the item identifiers of the likely purchases determined by the sales promotion neural network and produces a sales promotion relating to at least one of the item identifiers. Col. 4 lines 1-3. having a computer system 12 that communicates with <u>one or more customer information devices 14 and billing terminals 16</u>. Col. 4 lines 18-22.

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U.S. Pat. No 6,067, 525 claim 34	U.S. Pat. No 6,067,525 claim 34 with Court's claim construction	Cragun U.S. Pat. No. 5,774,868
		The missing items can then be the subject of a purchase suggestion, an automatically dispensed coupon, or other sales promotion indicated by an <u>output device</u> 17 such as a printer or display terminal. Col. 4 lines 28-35. The computer system 12 … includes a neural network <u>purchase advisor subsystem</u> 24 having neural networks that process purchase data as described further below. Col. 16 lines 58-62. the system of FIG. 1 preferably includes within the purchase advisor subsystem 24 a demographics prediction subsystem 25 that predicts the customer population that can be expected to be within the store at anyone time, based on a variety of factors.
using the particular subsystem to convert an existing customer into a lead, so as to generate repeat sales.	using the particular **[system that is part of a larger system]** to convert an existing customer into a lead, so as to generate repeat sales.	Billing Terminal 16, and Sales Promotion Output Device 17, Customer Information Device 14 (Fig.1). Fig. 1 shows an automatic sales promotion selection system 10, construction in accordance with the present invention, having a computer system 12 that communicates with one or more customer information devices 14 and billing terminals 16. (Col. 3, line 66-col. 4, line 3). Col. 2 lines 32-42. The system includes a <u>customer information device</u> that receives customer data relating to customer purchases of items from an inventory of items, a central processing unit having a sales promotion neural network and a storage unit containing a plurality of item identifiers comprising potential customer purchases of additional items

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U.S. Pat. No 6,067, 525 claim 34	U.S. Pat. No 6,067,525 claim 34 with Court's claim construction	Cragun U.S. Pat. No. 5,774,868
		from the inventory, and an output device that receives the item identifiers of the likely purchases determined by the sales promotion neural network and produces a sales promotion relating to at least one of the item identifiers. Col. 4 lines 1-3. having a computer system 12 that communicates with <u>one or more customer information devices 14 and billing terminals 16</u>. Col. 4 lines 18-22. The missing items can then be the subject of a purchase suggestion, an automatically dispensed coupon, or other sales promotion indicated by an <u>output device</u> 17 such as a printer or display terminal. Col. 4 lines 28-35. The computer system 12 … includes a neural network <u>purchase advisor subsystem</u> 24 having neural networks that process purchase data as described further below. Col. 16 lines 58-62. the system of FIG. 1 preferably includes within the purchase advisor subsystem 24 a demographics prediction subsystem 25 that predicts the customer population that can be expected to be within the store at anyone time, based on a variety of factors.

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U.S. Pat. No 6,067, 525 claim 35	U.S. Pat. No 6,067,525 claim 35 with Court's claim construction	Cragun U.S. Pat. No. 5,774,868
A method as recited in claim 20, further comprising the steps of:	A method as recited in claim 20, further comprising the steps of:	[Claim 20 chart incorporated by reference]
inferring occurrence of an event while converting a lead to a buying customer and prompting the buying customer to make a buying decision; and	**[logical process by which the fact that the event has occurred is derived by application of logical rules]** while converting a lead to a buying customer and prompting the buying customer to make a buying decision; and	Billing Terminal 16, and Sales Promotion Output Device 17, Customer Information Device 14 (Fig.1). Fig. 1 shows an automatic sales promotion selection system 10, construction in accordance with the present invention, having a computer system 12 that communicates with one or more customer information devices 14 and billing terminals 16. (Col. 3, line 66-col. 4, line 3). Col. 2 lines 32-42. The system includes a <u>customer information device</u> that receives customer data relating to customer purchases of items from an inventory of items, a central processing unit having a sales promotion neural network and a storage unit containing a plurality of item identifiers comprising potential customer purchases of additional items from the inventory, and an output device that receives the item identifiers of the likely purchases determined by the sales promotion neural network and produces a sales promotion relating to at least one of the item identifiers. Col. 4 lines 1-3. having a computer system 12 that communicates with <u>one or more customer information devices 14 and billing terminals 16</u>. Col. 4 lines 18-22.

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U.S. Pat. No 6,067, 525 claim 35	U.S. Pat. No 6,067,525 claim 35 with Court's claim construction	Cragun U.S. Pat. No. 5,774,868
		The missing items can then be the subject of a purchase suggestion, an automatically dispensed coupon, or other sales promotion indicated by an <u>output device</u> 17 such as a printer or display terminal. Col. 4 lines 28-35. The computer system 12 … includes a neural network <u>purchase advisor subsystem</u> 24 having neural networks that process purchase data as described further below. Col. 16 lines 58-62. the system of FIG. 1 preferably includes within the purchase advisor subsystem 24 a demographics prediction subsystem 25 that predicts the customer population that can be expected to be within the store at anyone time, based on a variety of factors.
using the particular subsystem to assist a salesperson in managing sales information.	using the particular **[system that is part of a larger system]** to assist a salesperson in managing sales information.	Billing Terminal 16, and Sales Promotion Output Device 17, Customer Information Device 14 (Fig.1). Fig. 1 shows an automatic sales promotion selection system 10, construction in accordance with the present invention, having a computer system 12 that communicates with one or more customer information devices 14 and billing terminals 16. (Col. 3, line 66-col. 4, line 3). Col. 2 lines 32-42. The system includes a <u>customer information device</u> that receives customer data relating to customer purchases of items from an inventory of items, a central processing unit having a sales promotion neural network and a storage unit containing a plurality of item identifiers comprising potential customer purchases of additional items

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U.S. Pat. No 6,067, 525 claim 35	U.S. Pat. No 6,067,525 claim 35 with Court's claim construction	Cragun U.S. Pat. No. 5,774,868
		from the inventory, and an output device that receives the item identifiers of the likely purchases determined by the sales promotion neural network and produces a sales promotion relating to at least one of the item identifiers. Col. 4 lines 1-3. having a computer system 12 that communicates with <u>one or more customer information devices 14 and billing terminals 16</u>. Col. 4 lines 18-22. The missing items can then be the subject of a purchase suggestion, an automatically dispensed coupon, or other sales promotion indicated by an <u>output device</u> 17 such as a printer or display terminal. Col. 4 lines 28-35. The computer system 12 … includes a neural network <u>purchase advisor subsystem</u> 24 having neural networks that process purchase data as described further below. Col. 16 lines 58-62. the system of FIG. 1 preferably includes within the purchase advisor subsystem 24 a demographics prediction subsystem 25 that predicts the customer population that can be expected to be within the store at anyone time, based on a variety of factors.

U.S. Pat. No 6,067, 525 claim 37	U.S. Pat. No 6,067,525 claim 37 with Court's claim construction	Cragun U.S. Pat. No. 5,774,868
A method as recited in claim 20, further comprising the steps of:	A method as recited in claim 20, further comprising the steps of:	[Claim 20 chart incorporated by reference]
inferring occurrence of an event while converting a lead to a buying customer; and	**[logical process by which the fact that the event has occurred is derived by application of logical rules]** while converting a lead to a buying customer; and	Billing Terminal 16, and Sales Promotion Output Device 17, Customer Information Device 14 (Fig.1). Fig. 1 shows an automatic sales promotion selection system 10, construction in accordance with the present invention, having a computer system 12 that communicates with one or more customer information devices 14 and billing terminals 16. (Col. 3, line 66-col. 4, line 3). Col. 2 lines 32-42. The system includes a <u>customer information device</u> that receives customer data relating to customer purchases of items from an inventory of items, a central processing unit having a sales promotion neural network and a storage unit containing a plurality of item identifiers comprising potential customer purchases of additional items from the inventory, and an output device that receives the item identifiers of the likely purchases determined by the sales promotion neural network and produces a sales promotion relating to at least one of the item identifiers. Col. 4 lines 1-3. having a computer system 12 that communicates with <u>one or more customer information devices 14 and billing terminals 16</u>. Col. 4 lines 18-22.

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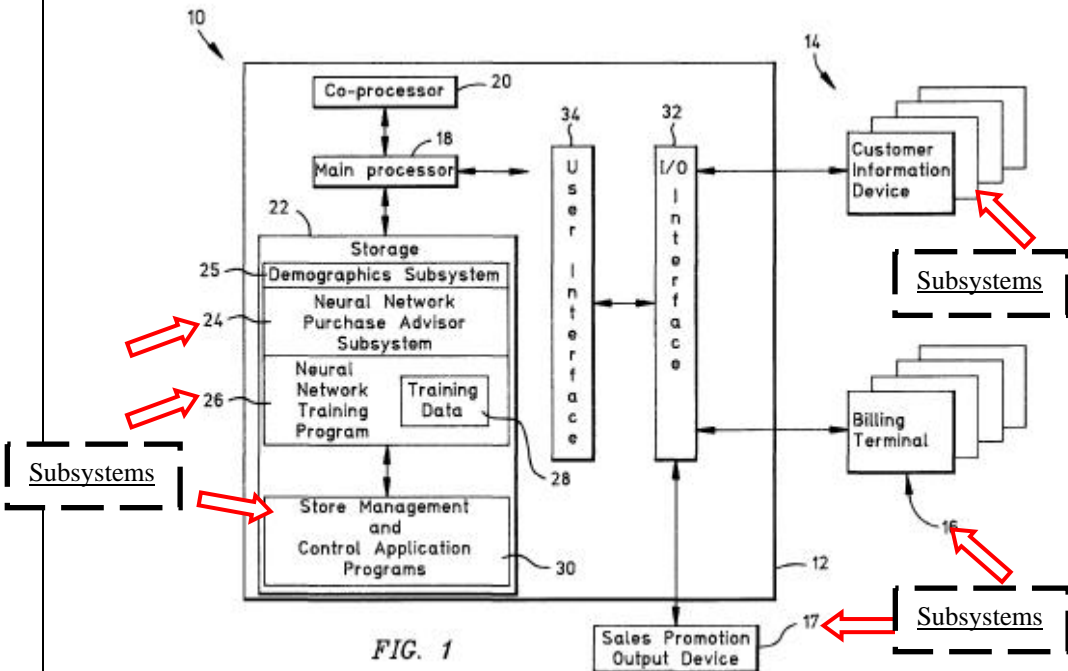| U.S. Pat. No 6,067, 525 claim 37	U.S. Pat. No 6,067,525 claim 37 with Court's claim construction	Cragun U.S. Pat. No. 5,774,868
		The missing items can then be the subject of a purchase suggestion, an automatically dispensed coupon, or other sales promotion indicated by an <u>output device</u> 17 such as a printer or display terminal. Col. 4 lines 28-35. The computer system 12 … includes a neural network <u>purchase advisor subsystem</u> 24 having neural networks that process purchase data as described further below. Col. 16 lines 58-62. the system of FIG. 1 preferably includes within the purchase advisor subsystem 24 a demographics prediction subsystem 25 that predicts the customer population that can be expected to be within the store at anyone time, based on a variety of factors.
using the particular subsystem to assist a salesperson in managing a plurality of salespeople.	using the particular **[system that is part of a larger system]** to assist a salesperson in managing a plurality of salespeople.	Billing Terminal 16, and Sales Promotion Output Device 17, Customer Information Device 14 (Fig.1). Fig. 1 shows an automatic sales promotion selection system 10, construction in accordance with the present invention, having a computer system 12 that communicates with one or more customer information devices 14 and billing terminals 16. (Col. 3, line 66-col. 4, line 3). Col. 2 lines 32-42. The system includes a <u>customer information device</u> that receives customer data relating to customer purchases of items from an inventory of items, a central processing unit having a sales promotion neural network and a storage unit containing a plurality of item identifiers comprising potential customer purchases of additional items

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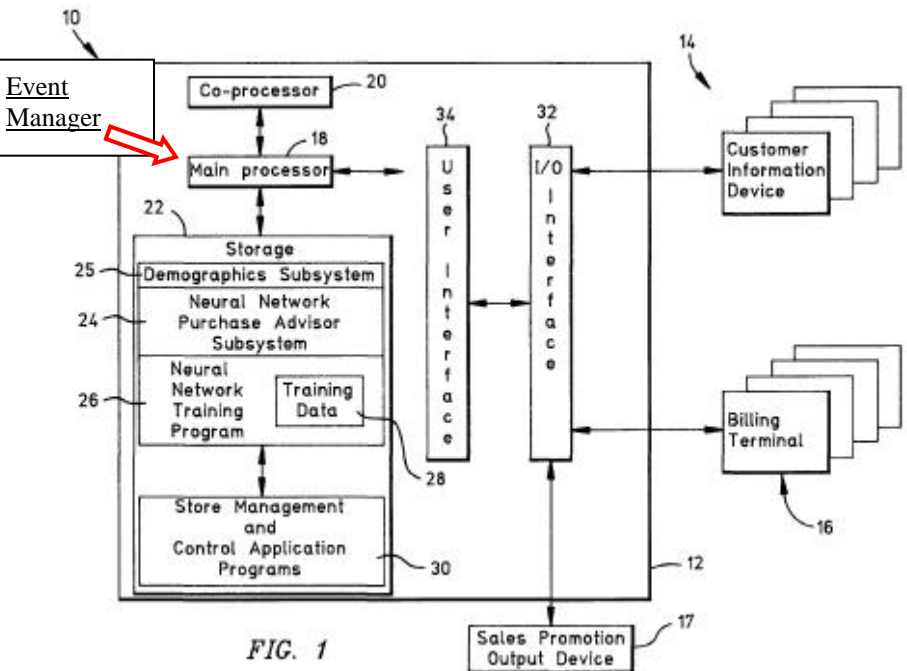| U.S. Pat. No 6,067, 525 claim 37	U.S. Pat. No 6,067,525 claim 37 with Court's claim construction	Cragun U.S. Pat. No. 5,774,868
		from the inventory, and an output device that receives the item identifiers of the likely purchases determined by the sales promotion neural network and produces a sales promotion relating to at least one of the item identifiers. Col. 4 lines 1-3. having a computer system 12 that communicates with <u>one or more customer information devices 14 and billing terminals 16</u>. Col. 4 lines 18-22. The missing items can then be the subject of a purchase suggestion, an automatically dispensed coupon, or other sales promotion indicated by an <u>output device</u> 17 such as a printer or display terminal. Col. 4 lines 28-35. The computer system 12 … includes a neural network <u>purchase advisor subsystem</u> 24 having neural networks that process purchase data as described further below. Col. 16 lines 58-62. the system of FIG. 1 preferably includes within the purchase advisor subsystem 24 a demographics prediction subsystem 25 that predicts the customer population that can be expected to be within the store at anyone time, based on a variety of factors.

U.S. Pat. No 6,067, 525 claim 40	U.S. Pat. No 6,067,525 claim 40 with Court's claim construction	Cragun U.S. Pat. No. 5,774,868
A computer implemented sales system used to facilitate a sales process, the system comprising:	A computer implemented sales system used to facilitate a sales process, the system comprising:	The preamble is not a limitation, nonetheless title and abstract: "An automated sales promotion selection system"
a plurality of subsystems configured to electronically facilitate actions performed during the sales process; and	a plurality of **[systems that are part of a larger system]** configured to electronically facilitate actions performed during the sales process; and	Billing Terminal 16, and Sales Promotion Output Device 17, Customer Information Device 14 (Fig.1). Fig. 1 shows an automatic sales promotion selection system 10, construction in accordance with the present invention, having a computer system 12 that communicates with one or more customer information devices 14 and billing terminals 16. (Col. 3, line 66-col. 4, line 3).

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U.S. Pat. No 6,067, 525 claim 40	U.S. Pat. No 6,067,525 claim 40 with Court's claim construction	Cragun U.S. Pat. No. 5,774,868

FIG. 1

Col. 2 lines 32-42.
The system includes a customer information device that receives customer data relating to customer purchases of items from an inventory of items, a central processing unit having a sales promotion neural network and a storage unit containing a plurality of item identifiers comprising potential customer purchases of additional items from the inventory, and an output device that receives the item identifiers of the likely purchases determined by the sales promotion neural network and produces a sales promotion relating to at least one of the item identifiers.

Col. 4 lines 1-3. |

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U.S. Pat. No 6,067, 525 claim 40	U.S. Pat. No 6,067,525 claim 40 with Court's claim construction	Cragun U.S. Pat. No. 5,774,868
		having a computer system 12 that communicates with <u>one or more customer information devices 14 and billing terminals 16</u>. Col. 4 lines 18-22. The missing items can then be the subject of a purchase suggestion, an automatically dispensed coupon, or other sales promotion indicated by an <u>output device</u> 17 such as a printer or display terminal. Col. 4 lines 28-35. The computer system 12 … includes a neural network <u>purchase advisor subsystem</u> 24 having neural networks that process purchase data as described further below. Col. 16 lines 58-62. the system of FIG. 1 preferably includes within the purchase advisor subsystem 24 a demographics prediction subsystem 25 that predicts the customer population that can be expected to be within the store at anyone time, based on a variety of factors.

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U.S. Pat. No 6,067, 525 claim 40	U.S. Pat. No 6,067,525 claim 40 with Court's claim construction	Cragun U.S. Pat. No. 5,774,868
an event manager coupled to the subsystems and configured to detect one or more changes in state characteristic of an event occurring in the system,	[hardware and/or software] coupled to the [systems that are part of a larger system] and configured to detect one or more [a change in a unique configuration of information within the system that is indicative of the occurrence of an event within the system occurring in the system,	 FIG. 1 Computer system 12, Neural network purchase adviser subsystem 24, demographic prediction subsystem 25; Col. 4 lines 28-30. The computer system 12 operates under control of a main processor 18, also referred to as a central processing unit (CPU). Col. 4 lines 31-34. The CPU retrieves and stores data from a memory storage unit 22, which includes a neural network purchase advisor subsystem 24.

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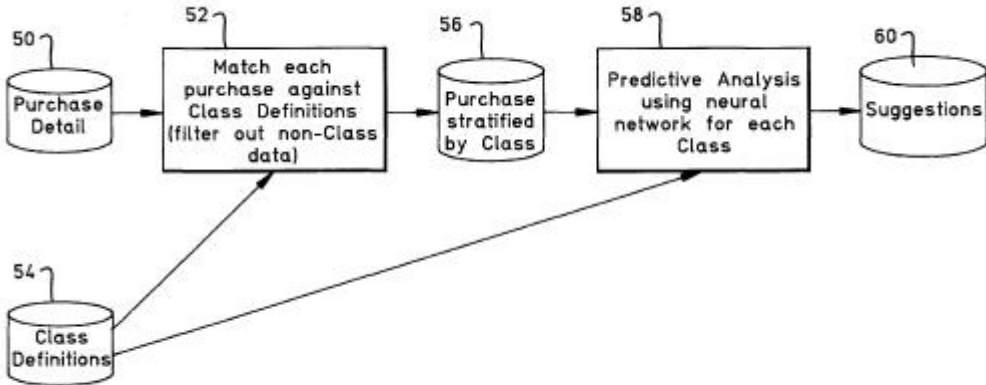| U.S. Pat. No 6,067, 525 claim 40	U.S. Pat. No 6,067,525 claim 40 with Court's claim construction	Cragun U.S. Pat. No. 5,774,868
		Col. 4 lines 40-45. The customer information devices 14 and billing terminals 16 communicate with the computer system 12 using an input/output interface 32, which in turn is connected to a user interface 34 that communicates with the CPU 18. The sales output device 17 also is connected to the input/output interface. Col. 4 lines 55-57. As items are purchased in a store, the neural network purchase advisor subsystem is invoked under the control of the CPU 18. Col. 4 lines 59-62. Purchase details comprising purchase transaction data from a customer purchase are automatically stored into the memory 22 as a sales clerk registers the purchases. Col. 7 lines 49-57. FIG. 3 is a representation of the data structure 62 used by the computer system 12 of FIG. 1 in constructing the purchase data. The data structure is referred to as the purchase detail file. FIG. 3 shows that the purchase detail file 62 contains information fields including a purchase identification number 64, also referred to as a transaction number, the date of the purchase 66, the time of the purchase 68, a first item number 70 that identifies an item purchased during the store visit, and a pointer 72 to a next purchase data record 74. Sales made via telephone orders and/or in the telemarketing context can be used with the system. (col. 18, lines 16-20). The demographic prediction subsystem 25 predicts the customer population that

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U.S. Pat. No 6,067, 525 claim 40	U.S. Pat. No 6,067,525 claim 40 with Court's claim construction	Cragun U.S. Pat. No. 5,774,868
		can be expected to be within the store at any one time based on a variety of factors. (Col. 16, lines 58-66).
infer occurrence of the event and a context in which the event occurred based at least in part on the detected changes in state,	[logical process by which the fact that the event has occurred is derived by application of logical rules] and [logical process by which the fact that information already existing within the system that becomes relevant upon the occurrence of the event is derived by application of logical rules] based at least in part on the detected changes in state; and	The computer system 12 analyzes the collected purchase transaction information for a customer to segment the items purchased into purchase classes that comprise groups of items ordinarily purchased together. Col. 4 lines 11-15. In this way, the sales promotion selection system 10 automatically collects purchase transaction data, analyzes the data relating to a particular customer purchase transaction, and uses neural networks to select a sales promotion calculated to result in additional purchases. Col. 4 lines 21-27. The purchase adviser 24 neural network automatically collects purchase transaction data, segments the purchase items of a particular customer purchase transaction into predetermined purchase classes that define groups of items ordinarily purchased together, and identifies items that belong to a purchase class but were missing from the purchase transaction. (Fig. 10, col. 11, line 36- col. 12, line 13; col. 18, lines 21-27). The demographic prediction subsystem 25 processes the collected data to generate output comprising a predicted customer population inside the store at a given time. The demographic subsystem processes the predicted customer population with another neural network of the subsystem to generate output comprising predicted purchases. That is, a listing of items that the subsystem predicts would be purchased by a typical customer at the given time. (Col. 17, lines 44-60).

U.S. Pat. No 6,067, 525 claim 40	U.S. Pat. No 6,067,525 claim 40 with Court's claim construction	Cragun U.S. Pat. No. 5,774,868
		FIG. 2 Col. 4 line 65 – Col. 5 line 12. purchase items listed in the purchase transaction data are compared against predetermined purchase class definitions. In this step, purchase items that have not been characterized as fitting into one of the predetermined purchase classes are filtered out of the purchase data. … The class definitions are obtained from the memory storage unit 22, as represented by the flow diagram box numbered 54. For each class containing items that match with one or more of the items purchased, a sublist is created by the CPU 18. … The CPU creates a list of the purchase items belonging to each class. This step is represented by the flow diagram box numbered 56. Col. 5 lines 29-35. Classes may include items that have a purchase relationship but that do not clearly fit into an aptly named category. Analysis of purchase information might be necessary to identify such classes. Each one of the classes comprises a list of

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U.S. Pat. No 6,067,525 claim 40	U.S. Pat. No 6,067,525 claim 40 with Court's claim construction	Cragun U.S. Pat. No. 5,774,868
		purchase items that, based upon analysis of historical data, define items frequently purchased together. Col. 7 line 66 – Col. 8 line 1. FIG. 4 is a representation of the data structure 80 that defines the classes. The data structure is referred to as the class definition file. Col. 16 lines 62-66. The demographics prediction subsystem advantageously uses a customer population neural network that is designed to make predictions of the customers in the store and then to predict purchases that such a customer population would make. Col. 17 lines 5-37. FIG. 18 is a representation of a demographics data structure 303 used by the CPU 18 (FIG. 1) in running the customer population neural network of the demographics prediction subsystem. … The first data field illustrated in the data structure 302 is for the time of day 304. Time of day can be important in predicting customer populations because, for example, buyers with particular characteristics might shop early in the day as opposed to those who shop late in the day or late in the evening. The next data field is for the date 306. The date field permits the system to account for seasonal buying characteristics, holiday variations, and other buyer characteristics associated with the day of the week, month, or year. A weather data field 308 permits the system to further account for seasonal or other weather-related phenomenon. For example, rainy weather likely will result in a customer population favorably disposed to suggestions for purchases of rain gear such as boots, umbrellas, and overcoats, regardless of other purchases

U.S. Pat. No 6,067, 525 claim 40	U.S. Pat. No 6,067,525 claim 40 with Court's claim construction	Cragun U.S. Pat. No. 5,774,868
		made during a store purchase transaction. Another data field is one for customer data 310, which includes data relating to recent purchases by other customers, spending habits of the local population, economic data, and the like. The next data field is for buyer preference data 312, which comprises item identification numbers of products predicted to be purchased. Col. 17 lines 51-55. represented by the box numbered 324, is to process the collected data with the demographic neural network to generated output comprising a predicted customer population inside the store at a given time.
link the inferred event with an action to be performed during the sales process based on prior sales experience using the sales system, and	link the inferred event with an action to be performed during the sales process based on prior sales experience using the sales system, and	The computer system 12 analyzes the collected purchase transaction information for a customer to segment the items purchased into purchase classes that comprise groups of items ordinarily purchased together. The system then uses neural networks to identify items that are missing from a purchase transaction that are members of a purchase class otherwise represented in the purchase transaction. The missing items can then be the subject of a purchase suggestion, an automatically dispensed coupon, or other sales promotion indicated by an output device 17 such as a printer or display terminal. In this way, the sales promotion selection system 10 automatically collects purchase transaction data, analyzes the data relating to a particular customer purchase transaction, and uses neural networks to select a sales promotion calculated to result in additional purchases. Col. 4 lines 11-27.
automatically initiate an operation using one or more of the plurality of subsystems to facilitate the action	automatically initiating an operation using one or more of the plurality of [systems that are part of a larger system] to facilitate the	The demographic prediction subsystem 25 provides the predicted sales purchase data to the purchase advisor subsystem and its neural networks. The purchase advisor subsystem will segment the purchase items into purchase classes and generate selected sales promotions, such as purchase suggestions. The selected sales promotions can be used on the general customer population or for direct mail campaigns and the like, rather than the use described

U.S. Pat. No 6,067, 525 claim 40	U.S. Pat. No 6,067,525 claim 40 with Court's claim construction	Cragun U.S. Pat. No. 5,774,868
to be performed based on the inferred context.	action to be performed based on the inferred context.	previously of targeting particular customers making purchases. The output comprising the predicted customer population in the store and the output comprising the predicted purchase transactions can be used independently of any use in the purchase advisor subsystem. It might be useful to a store manager to have a sense of customers that can be expected in a store at anyone time, or to have an understanding of what products can reasonably be expected to be purchased at a given time of day. (Col. 17, line 60-col. 18, line 15).
		Col. 5 lines 42-49. For each class, the purchase items that fit within the class are processed through the neural network for that class to predict missing items that ordinarily are purchased in a transaction at the same time as the purchase items, as represented by the flow diagram box numbered 58 in FIG. 2. These additional items are suggested to the customer for purchase, as indicated by the flow diagram box numbered 60.

U.S. Pat. No 6,067, 525 claim 40	U.S. Pat. No 6,067,525 claim 40 with Court's claim construction	Cragun U.S. Pat. No. 5,774,868
		FIG. 10 Col. 2, lines 56-59 The missing items can then be suggested by a sales clerk for purchase or can be

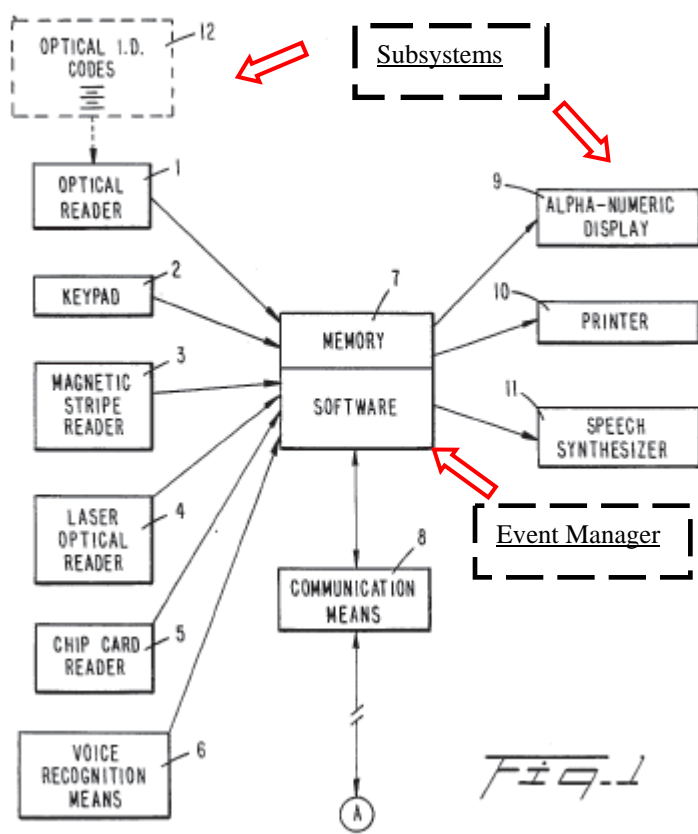| U.S. Pat. No 6,067, 525 claim 40	U.S. Pat. No 6,067,525 claim 40 with Court's claim construction	Cragun U.S. Pat. No. 5,774,868
		the subject of an automatically produced promotion, such as a coupon that can be redeemed for a discounted purchase price. Col. 18, lines 27-29. The system then selects a sales promotion to suggest the purchase of a missing item that likely will result in an additional sale. Col. 17 lines 55-67. at box 326, the demographic subsystem processes the predicted customer population with another neural network of the subsystem to generate output comprising predicted purchases. That is, a listing of items that the subsystem predicts would be purchased by a typical customer at the given time. The next step, represented by the flow diagram box numbered 328, is to provide the predicted sales purchase data to the purchase advisor subsystem and its neural networks. As described above, the purchase advisor subsystem will segment the purchase items into purchase classes and generate selected sales promotions, such as purchase suggestions. Col. 18, line 2-6. The selected sales promotions can be used on the general customer population or for direct mail campaigns and the like, rather than the use described previously of targeting particular customers making purchases.

Gorog U.S. Pat. No. 4,947,028 anticipates asserted Claims 1-3, 5-7, 20, 24, 34, and 40

U.S. Pat. No 6,067,525 claim 1	U.S. Pat. No 6,067,525 claim 1 with Court's claim construction	Gorog U.S. Pat. No. 4,947,028
A computer implemented sales system used to facilitate a sales process, the system comprising:	A computer implemented sales system used to facilitate a sales process, the system comprising:	The preamble is not a limitation, nonetheless col. 1 lines 10-13: "The originality of the invention lies in the integration of existing devices, products, and networks to accomplish a unique service which will making the process of buying and selling significantly more efficient." Col. 7 lines 39-43: "In summary, this process selects the merchant/supplier, confirms the availability of inventory to fulfill the sale, confirms the price, method of payment, and credit status of the consumer as well as the delivery date and method of delivery."

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U.S. Pat. No 6,067,525 claim 1	U.S. Pat. No 6,067,525 claim 1 with Court's claim construction	Gorog U.S. Pat. No. 4,947,028
a plurality of subsystems configured to facilitate one or more actions performed during at least one phase of the sales process; and	a plurality of [systems that are part of a larger system] configured to facilitate one or more actions performed during at least one phase of the sales process; and	

Col. 2 lines 54-68:

"(c) A order computer terminal ("OCT") with means to input data orally, optically, magnetically, electronically, and manually having associated order processing software and communications capabilities
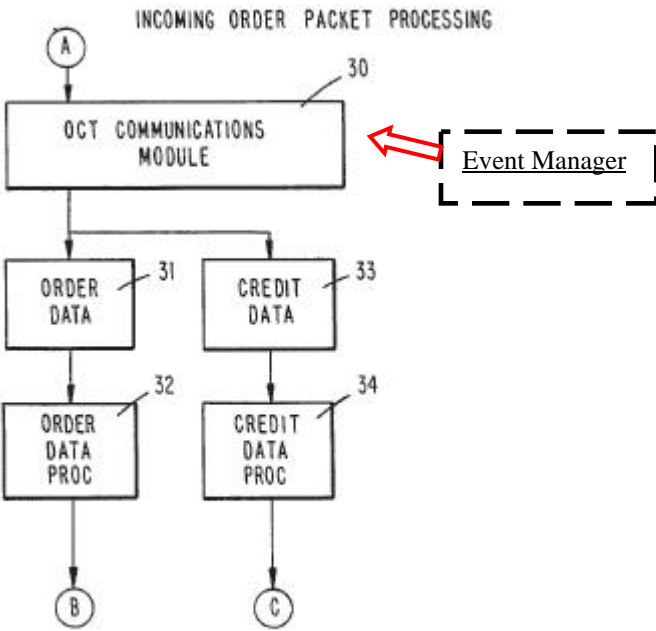
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U.S. Pat. No 6,067,525 claim 1	U.S. Pat. No 6,067,525 claim 1 with Court's claim construction	Gorog U.S. Pat. No. 4,947,028
		allowing receipt of communications from the CCS and further providing output communications to the CCS. The CCS can send data to or receive data from the OCT's or from other computer systems, for the purpose of accepting data transmitted from such terminals or other computers over normal telephone lines, radio, television, satellite, or any other signals from remote locations to the CCS. The CCS can also communicate with other computers using accepted industry protocols." Col. 9 lines 8-30: "An automated order and payment [sales] system, which comprises: … A central data processing means with communication capability adapted to receive information from a plurality of remote programmable data input/output means…"
an event manager, coupled to the subsystems, the event manager detecting one or more changes in state characteristic of an event occurring within the system	[hardware and/or software], coupled to the [systems that are part of a larger system], the [hardware and/or software] detecting one or more [changes in a unique configuration of information within the system that is indicative of the occurrence of an event within the system] occurring within the system,	Col. 6 lines 17-29: Referring to FIG. 3, the CCS receives the order packets over a variety of transmission media (e.g., telephone line, optical fiber transmission lines, satellite data link) from OCTs via the OCT communications module [30]. This module contains the hardware and software necessary to receive order and credit information from OCTs when a consumer sends such information. The incoming order packet process causes the order packet data to be divided into order data [31] that is, the information relating to the merchant, identification of the goods or services, and the amount of items desired. This information then is subjected to the order data processing software [32] of the CCS. Col. 2 lines 46-50:

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U.S. Pat. No 6,067,525 claim 1	U.S. Pat. No 6,067,525 claim 1 with Court's claim construction	Gorog U.S. Pat. No. 4,947,028
		"(a) A central computer system ("CCS") with a variety of programs, processing and storage capability and communications capabilities to allow input and output communications with order computer terminals."
		Col. 2 lines 61-68:
		"The CCS can send data to or receive data from the OCT's or from other computer systems, for the purpose of accepting data transmitted from such terminals or other computers over normal telephone lines, radio, television, satellite, or any other signals from remote locations to the CCS. The CCS can also communicate with other computers using accepted industry protocols."
		Col. 3 lines 1-8:
		"The CCS has various computer software programs that allow product/service order information to be accepted and transmitted from the central computer. Such software will also confirm or deny orders for products based upon records of inventories that have been provided by participating businesses or by sending a query to other computers holding the necessary data records for participating businesses."
		Col. 9 lines 23-26:
		"A central data processing [event manager] means with communication capability [coupled to] adapted to receive information from a plurality of remote programmable data input/output means [subsystems] …"
		Reexamination col. 1 Line 68 – col. 2 lines 1-4:
		"said central data processor [event manager] comprising:… means for receiving [detecting changes in state characteristic of an event] first [from optical reader] and second [from payment card reader] data…"

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U.S. Pat. No 6,067,525 claim 1	U.S. Pat. No 6,067,525 claim 1 with Court's claim construction	Gorog U.S. Pat. No. 4,947,028
inferring occurrence of the event and a context in which the event occurred based at least in part on the detected changes in state, and	[logical process by which the fact that the event has occurred is derived by application of logical rules] and [logical process by which the fact that information already existing within the system that becomes relevant upon the occurrence of the event is derived by application of logical rules] based at least in part on the detected changes in state, and	 Col. 6 lines 37-51: "[T]he CCS receives the order packets over a variety of transmission media (e.g., telephone line, optical fiber transmission lines, satellite data link) from OCTs via the OCT communications module [30]. This module contains the hardware and software necessary to receive order and credit information from OCTs when a consumer sends such information. The incoming order packet process causes the order packet data to be divided into order data [31] that is, the information relating to the merchant, identification of the goods or services, and the

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U.S. Pat. No 6,067,525 claim 1	U.S. Pat. No 6,067,525 claim 1 with Court's claim construction	Gorog U.S. Pat. No. 4,947,028
		amount of items desired. This information then is subjected to the order data processing software [32] of the CCS." Reexamination col. 2 lines 1-17: "means for receiving… first and second data…order confirmation [inferring an event] means … subsequent to receipt of payment authorization from the external database…"
automatically initiating an <u>operation</u> in one or more particular subsystems of the computer to facilitate a new action based on the inferred <u>context</u>.	automatically initiating an operation in one or more particular **[systems that are part of a larger system]** of the computer to facilitate a new action based on the inferred context.	Reexamination col. 2 lines 18-23: "means for <u>transmitting</u> at least the first data and the <u>payment authorization information</u> to a product/service provider in accordance with the first data, in response to receipt by the central data processor of an order confirmation message from the remote terminal"

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U.S. Pat. No 6,067,525 claim 2	U.S. Pat. No 6,067,525 claim 2 with Court's claim construction	Gorog U.S. Pat. No. 4,947,028
A system as recited in claim 1,	A system as recited in claim 1,	[Claim 1 chart incorporated by reference]
wherein the inferred context includes information related to at least one phase of the sales process.	wherein the inferred **[information already existing within the system that becomes relevant upon the occurrence of an event]** includes information related to at least one phase of the sales process.	Col. 6 lines 37-51: "[T]he CCS receives the order packets over a variety of transmission media (e.g., telephone line, optical fiber transmission lines, satellite data link) from OCTs via the OCT communications module [30]. This module contains the hardware and software necessary to receive order and credit information from OCTs when a consumer sends such information. The incoming order packet process causes the order packet data to be divided into order data [31] that is, the information relating to the merchant, identification of the goods or services, and the amount of items desired. This information then is subjected to the order data processing software [32] of the CCS." Reexamination col. 2 lines 1-17: "means for receiving… first and second data…order confirmation [inferring an event] means … subsequent to receipt of payment authorization from the external database…"

U.S. Pat. No 6,067,525 claim 3	U.S. Pat. No 6,067,525 claim 3 with Court's claim construction	Gorog U.S. Pat. No. 4,947,028
A system as recited in claim 1,	A system as recited in claim 1,	[Claim 1 chart incorporated by reference]
wherein the inferred context includes information related to whether a previous event has occurred in the sales process.	wherein the inferred **[information already existing within the system that becomes relevant upon the occurrence of an event]** includes information related to whether a previous event has occurred in the sales process.	Col. 6 lines 37-51: "[T]he CCS receives the order packets over a variety of transmission media (e.g., telephone line, optical fiber transmission lines, satellite data link) from OCTs via the OCT communications module [30]. This module contains the hardware and software necessary to receive order and credit information from OCTs when a consumer sends such information. The incoming order packet process causes the order packet data to be divided into order data [31] that is, the information relating to the merchant, identification of the goods or services, and the amount of items desired. This information then is subjected to the order data processing software [32] of the CCS." Reexamination col. 2 lines 1-17: "means for receiving… first and second data…order confirmation [inferring an event] means … subsequent to receipt of payment authorization from the external database…"

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U.S. Pat. No 6,067,525 claim 5	U.S. Pat. No 6,067,525 claim 5 with Court's claim construction	Gorog U.S. Pat. No. 4,947,028
A system as recited in claim 1, wherein the plurality of subsystems comprises:	A system as recited in claim 1, wherein the plurality of **[systems that are parts of a larger system]** comprises:	[Claim 1 chart incorporated by reference]
a time with customer subsystem configured to convert a lead to a buying customer, so as to close a sale; and	a time with customer **[system that is part of a larger system]** configured to convert a lead to a buying customer, so as to close a sale; and	Col. 2 lines 54-68: "(c) A order computer terminal ("OCT") with means to input data orally, optically, magnetically, electronically, and manually having associated order processing software and communications capabilities allowing receipt of communications from the CCS and further providing output communications to the CCS. The CCS can send data to or receive data from the OCT's or from other computer systems, for the purpose of accepting data transmitted from such terminals or other computers over normal telephone lines, radio, television, satellite, or any other signals from remote locations to the CCS. The CCS can also communicate with other computers using accepted industry protocols." Col. 9 lines 8-30: "An automated order and payment [sales] system, which comprises: … A central data processing means with communication capability adapted to receive information from a plurality of remote programmable data input/output means…"
a lead generation subsystem configured to convert a name to a potential	a lead generation **[system that is a part of a larger system]** configured to	Col. 2 lines 54-68: "(c) A order computer terminal ("OCT") with means to input data orally, optically, magnetically, electronically, and manually having

U.S. Pat. No 6,067,525 claim 5	U.S. Pat. No 6,067,525 claim 5 with Court's claim construction	Gorog U.S. Pat. No. 4,947,028
customer.	convert a name to a potential customer.	associated order processing software and communications capabilities allowing receipt of communications from the CCS and further providing output communications to the CCS. The CCS can send data to or receive data from the OCT's or from other computer systems, for the purpose of accepting data transmitted from such terminals or other computers over normal telephone lines, radio, television, satellite, or any other signals from remote locations to the CCS. The CCS can also communicate with other computers using accepted industry protocols." Col. 9 lines 8-30: "An automated order and payment [sales] system, which comprises: … A central data processing means with communication capability adapted to receive information from a plurality of remote programmable data input/output means…"

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U.S. Pat. No 6,067,525 claim 6	U.S. Pat. No 6,067,525 claim 6 with Court's claim construction	Gorog U.S. Pat. No. 4,947,028
A system as recited in claim 1, wherein the plurality of subsystems comprises; [sic]	A system as recited in claim 1, wherein the plurality of **[systems that are parts of a larger system] comprises;** [sic]	[Claim 1 chart incorporated by reference]
a time with customer subsystem configured to convert a lead to a buying customer, so as to close a sale; and	a time with customer **[system that is part of a larger system]** configured to convert a lead to a buying customer, so as to close a sale; and	Col. 2 lines 54-68: "(c) A order computer terminal ("OCT") with means to input data orally, optically, magnetically, electronically, and manually having associated order processing software and communications capabilities allowing receipt of communications from the CCS and further providing output communications to the CCS. The CCS can send data to or receive data from the OCT's or from other computer systems, for the purpose of accepting data transmitted from such terminals or other computers over normal telephone lines, radio, television, satellite, or any other signals from remote locations to the CCS. The CCS can also communicate with other computers using accepted industry protocols." Col. 9 lines 8-30: "An automated order and payment [sales] system, which comprises: … A central data processing means with communication capability adapted to receive information from a plurality of remote programmable data input/output means…"
an order management subsystem configured to	an order management **[system that is part of a**	Col. 2 lines 54-68: "(c) A order computer terminal ("OCT") with means to input data

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U.S. Pat. No 6,067,525 claim 6	U.S. Pat. No 6,067,525 claim 6 with Court's claim construction	Gorog U.S. Pat. No. 4,947,028
convert the sale such that a product or service delivered matches a product or service sold.	**larger system]** configured to convert the sale such that a product or service delivered matches a product or service sold.	orally, optically, magnetically, electronically, and manually having associated order processing software and communications capabilities allowing receipt of communications from the CCS and further providing output communications to the CCS. The CCS can send data to or receive data from the OCT's or from other computer systems, for the purpose of accepting data transmitted from such terminals or other computers over normal telephone lines, radio, television, satellite, or any other signals from remote locations to the CCS. The CCS can also communicate with other computers using accepted industry protocols." Col. 9 lines 8-30: "An automated order and payment [sales] system, which comprises: … A central data processing means with communication capability adapted to receive information from a plurality of remote programmable data input/output means…"

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U.S. Pat. No 6,067,525 claim 7	U.S. Pat. No 6,067,525 claim 7 with Court's claim construction	Gorog U.S. Pat. No. 4,947,028
A system as recited in claim 1, wherein the plurality of subsystems comprises:	A system as recited in claim 1, wherein the plurality of **[systems that are parts of a larger system]** comprises:	[Claim 1 chart incorporated by reference]
a time with customer subsystem configured to convert a lead to a buying customer, so as to close a sale; and	a time with customer **[system that is part of a larger system]** configured to convert a lead to a buying customer, so as to close a sale; and	Col. 2 lines 54-68: "(c) A order computer terminal ("OCT") with means to input data orally, optically, magnetically, electronically, and manually having associated order processing software and communications capabilities allowing receipt of communications from the CCS and further providing output communications to the CCS. The CCS can send data to or receive data from the OCT's or from other computer systems, for the purpose of accepting data transmitted from such terminals or other computers over normal telephone lines, radio, television, satellite, or any other signals from remote locations to the CCS. The CCS can also communicate with other computers using accepted industry protocols." Col. 9 lines 8-30: "An automated order and payment [sales] system, which comprises: … A central data processing means with communication capability adapted to receive information from a plurality of remote programmable data input/output means…"
a customer retention subsystem configured to	a customer retention **[system that is part of a larger**	Col. 2 lines 54-68:

U.S. Pat. No 6,067,525 claim 7	U.S. Pat. No 6,067,525 claim 7 with Court's claim construction	Gorog U.S. Pat. No. 4,947,028
convert an existing customer into a lead, so as to generate repeat sales.	**system]** configured to convert an existing customer into a lead, so as to generate repeat sales.	"(c) A order computer terminal ("OCT") with means to input data orally, optically, magnetically, electronically, and manually having associated order processing software and communications capabilities allowing receipt of communications from the CCS and further providing output communications to the CCS. The CCS can send data to or receive data from the OCT's or from other computer systems, for the purpose of accepting data transmitted from such terminals or other computers over normal telephone lines, radio, television, satellite, or any other signals from remote locations to the CCS. The CCS can also communicate with other computers using accepted industry protocols." Col. 9 lines 8-30: "An automated order and payment [sales] system, which comprises: … A central data processing means with communication capability adapted to receive information from a plurality of remote programmable data input/output means…"

U.S. Pat. No 6,067,525 claim 20	U.S. Pat. No 6,067,525 claim 20 with Court's claim construction	Gorog U.S. Pat. No. 4,947,028
A method of facilitating a sales process using a computer arrangement having a plurality of subsystems configured to facilitate one or more actions performed during at least one phase of the sales process, the method comprising the steps of:	A method of facilitating a sales process using a computer arrangement having a plurality of **[systems that are part of a larger system]** configured to facilitate one or more actions performed during at least one phase of the sales process, the method comprising the steps of:	The preamble is not a limitation, nonetheless col. 1 lines 10-13: "The originality of the invention lies in the integration of existing devices, products, and networks to accomplish a unique service which will making the process of buying and selling significantly more efficient." Col. 7 lines 39-43: "In summary, this process selects the merchant/supplier, confirms the availability of inventory to fulfill the sale, confirms the price, method of payment, and credit status of the consumer as well as the delivery date and method of delivery."

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U.S. Pat. No 6,067,525 claim 20	U.S. Pat. No 6,067,525 claim 20 with Court's claim construction	Gorog U.S. Pat. No. 4,947,028

Col. 2 lines 54-68:

"(c) A order computer terminal ("OCT") with means to input data orally, optically, magnetically, electronically, and manually having associated order processing software and communications capabilities |

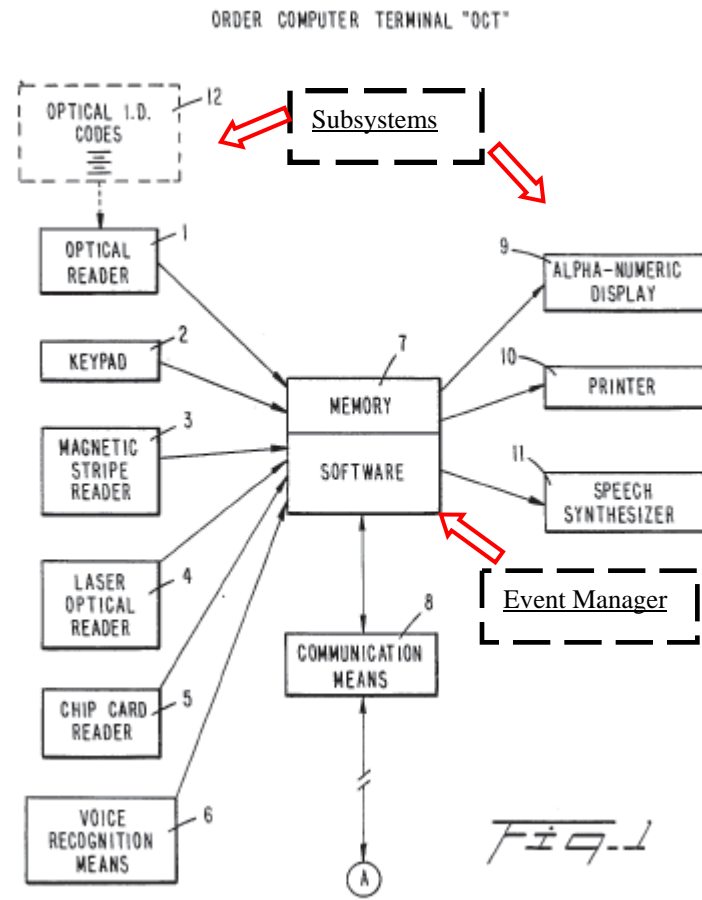| U.S. Pat. No 6,067,525 claim 20	U.S. Pat. No 6,067,525 claim 20 with Court's claim construction	Gorog U.S. Pat. No. 4,947,028
		allowing receipt of communications from the CCS and further providing output communications to the CCS. The CCS can send data to or receive data from the OCT's or from other computer systems, for the purpose of accepting data transmitted from such terminals or other computers over normal telephone lines, radio, television, satellite, or any other signals from remote locations to the CCS. The CCS can also communicate with other computers using accepted industry protocols." Col. 9 lines 8-30: "An automated order and payment [sales] system, which comprises: … A central data processing means with communication capability adapted to receive information from a plurality of remote programmable data input/output means…"
automatically detecting one or more changes in state characteristic of an event occurring in the sales process;	automatically detecting one or more **[changes in a unique configuration of information within the system that is indicative of the occurrence of an event within the system]** occurring in the sales process;	Col. 6 lines 17-29: Referring to FIG. 3, the CCS receives the order packets over a variety of transmission media (e.g., telephone line, optical fiber transmission lines, satellite data link) from OCTs via the OCT communications module [30]. This module contains the hardware and software necessary to <u>receive order</u> and credit information from OCTs when a consumer sends such information. The <u>incoming order packet</u> process causes the order packet data to be divided into order data [31] that is, the information relating to the merchant, identification of the goods or services, and the amount of items desired. This information then is subjected to the order data processing software [32] of the CCS. Col. 2 lines 46-50:

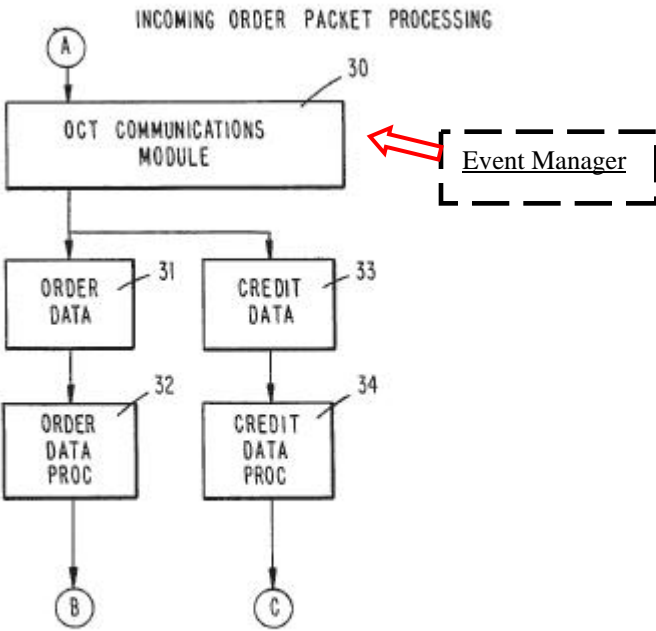| U.S. Pat. No 6,067,525 claim 20	U.S. Pat. No 6,067,525 claim 20 with Court's claim construction	Gorog U.S. Pat. No. 4,947,028
		"(a) A central computer system ("CCS") with a variety of programs, processing and storage capability and communications capabilities to allow input and output communications with order computer terminals."
		Col. 2 lines 61-68:
		"The CCS can send data to or receive data from the OCT's or from other computer systems, for the purpose of accepting data transmitted from such terminals or other computers over normal telephone lines, radio, television, satellite, or any other signals from remote locations to the CCS. The CCS can also communicate with other computers using accepted industry protocols."
		Col. 3 lines 1-8:
		"The CCS has various computer software programs that allow product/service order information to be accepted and transmitted from the central computer. Such software will also confirm or deny orders for products based upon records of inventories that have been provided by participating businesses or by sending a query to other computers holding the necessary data records for participating businesses."
		Reexamination col. 1 Line 68 – col. 2 lines 1-4:
		"said central data processor [event manager] comprising:… means for receiving [detecting changes in state characteristic of an event] first [from optical reader] and second [from payment card reader] data…"

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U.S. Pat. No 6,067,525 claim 20	U.S. Pat. No 6,067,525 claim 20 with Court's claim construction	Gorog U.S. Pat. No. 4,947,028
inferring occurrence of the event and a context in which the event occurred based at least in part on the detected changes in state; and	[logical process by which the fact that the event has occurred is derived by application of logical rules] and [logical process by which the fact that information already existing within the system that becomes relevant upon the occurrence of the event is derived by application of logical rules] based at least in part on the detected changes in state; and	INCOMING ORDER PACKET PROCESSING *Fig. 3* Col. 6 lines 37-51: "[T]he CCS receives the order packets over a variety of transmission media (e.g., telephone line, optical fiber transmission lines, satellite data link) from OCTs via the OCT communications module [30]. This module contains the hardware and software necessary to receive order and credit information from OCTs when a consumer sends such information. The incoming order packet process causes the order packet data to be divided into order data [31] that is, the information relating to the merchant, identification of the goods or services, and the

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U.S. Pat. No 6,067,525 claim 20	U.S. Pat. No 6,067,525 claim 20 with Court's claim construction	Gorog U.S. Pat. No. 4,947,028
		amount of items desired. This information then is subjected to the order data processing software [32] of the CCS." Reexamination col. 2 lines 1-17: "means for receiving… first and second data…order confirmation [inferring an event] means … subsequent to receipt of payment authorization from the external database…"
automatically initiating an operation in one or more particular subsystems of the computer to facilitate a new action based on the inferred context.	automatically initiating an operation in one or more particular **[systems that are part of a larger system]** of the computer to facilitate a new action based on the inferred context.	Reexamination col. 2 lines 18-23: "means for <u>transmitting</u> at least the first data and the <u>payment authorization information</u> to a product/service provider in accordance with the first data, in response to receipt by the central data processor of an order confirmation message from the remote terminal"

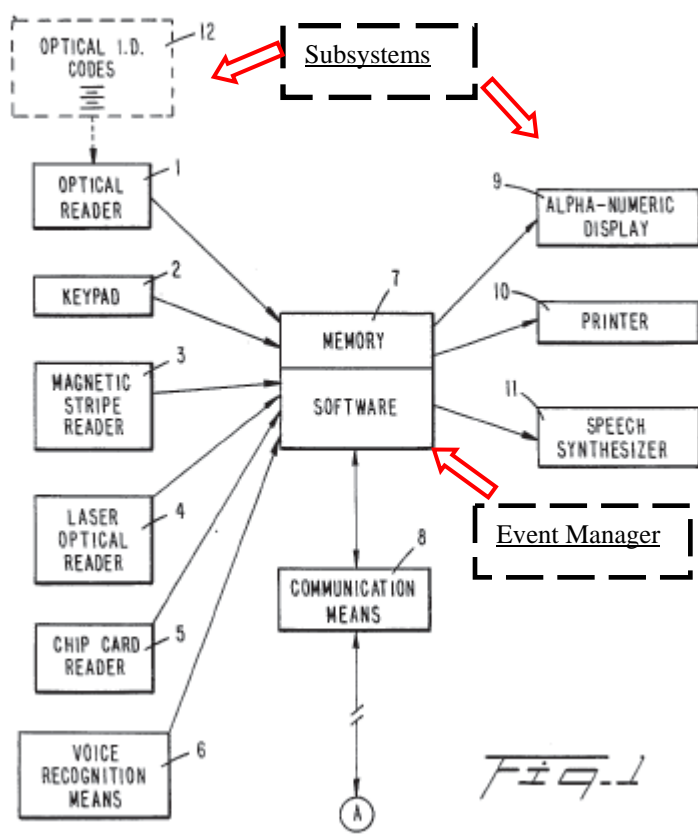| U.S. Pat. No 6,067, 525 claim 24	U.S. Pat. No 6,067,525 claim 24 with Court's claim construction	Gorog U.S. Pat. No. 4,947,028
A method as recited in claim 20,	A method as recited in claim 20,	[Claim 20 chart incorporated by reference]
wherein the inferred context includes information related to at least one phase of the sales process.	wherein the inferred **[information already existing within the system that becomes relevant upon the occurrence of an event]** includes information related to at least one phase of the sales process.	Col. 6 lines 37-51: "[T]he CCS receives the order packets over a variety of transmission media (e.g., telephone line, optical fiber transmission lines, satellite data link) from OCTs via the OCT communications module [30]. This module contains the hardware and software necessary to receive order and credit information from OCTs when a consumer sends such information. The incoming order packet process causes the order packet data to be divided into order data [31] that is, the information relating to the merchant, identification of the goods or services, and the amount of items desired. This information then is subjected to the order data processing software [32] of the CCS." Reexamination col. 2 lines 1-17: "means for receiving… first and second data…order confirmation [inferring an event] means … subsequent to receipt of payment authorization from the external database…"

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U.S. Pat. No 6,067, 525 claim 34	U.S. Pat. No 6,067,525 claim 34 with Court's claim construction	Gorog U.S. Pat. No. 4,947,028
A method as recited in claim 20, further comprising the steps of:	A method as recited in claim 20, further comprising the steps of:	[Claim 20 chart incorporated by reference]
inferring occurrence of an event while converting a lead to a buying customer; and	**[logical process by which the fact that the event has occurred is derived by application of logical rules]** while converting a lead to a buying customer; and	Col. 2 lines 54-68: "(c) A order computer terminal ("OCT") with means to input data orally, optically, magnetically, electronically, and manually having associated order processing software and communications capabilities allowing receipt of communications from the CCS and further providing output communications to the CCS. The CCS can send data to or receive data from the OCT's or from other computer systems, for the purpose of accepting data transmitted from such terminals or other computers over normal telephone lines, radio, television, satellite, or any other signals from remote locations to the CCS. The CCS can also communicate with other computers using accepted industry protocols." Col. 9 lines 8-30: "An automated order and payment [sales] system, which comprises: … A central data processing means with communication capability adapted to receive information from a plurality of remote programmable data input/output means…"
using the particular subsystem to convert an existing customer into a	using the particular **[system that is part of a larger system]** to convert an	Col. 2 lines 54-68:

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U.S. Pat. No 6,067, 525 claim 34	U.S. Pat. No 6,067,525 claim 34 with Court's claim construction	Gorog U.S. Pat. No. 4,947,028
lead, so as to generate repeat sales.	existing customer into a lead, so as to generate repeat sales.	"(c) A order computer terminal ("OCT") with means to input data orally, optically, magnetically, electronically, and manually having associated order processing software and communications capabilities allowing receipt of communications from the CCS and further providing output communications to the CCS. The CCS can send data to or receive data from the OCT's or from other computer systems, for the purpose of accepting data transmitted from such terminals or other computers over normal telephone lines, radio, television, satellite, or any other signals from remote locations to the CCS. The CCS can also communicate with other computers using accepted industry protocols." Col. 9 lines 8-30: "An automated order and payment [sales] system, which comprises: … A central data processing means with communication capability adapted to receive information from a plurality of remote programmable data input/output means…"

U.S. Pat. No 6,067, 525 claim 40	U.S. Pat. No 6,067,525 claim 40 with Court's claim construction	Gorog U.S. Pat. No. 4,947,028
A computer implemented sales system used to facilitate a sales process, the system comprising:	A computer implemented sales system used to facilitate a sales process, the system comprising:	The preamble is not a limitation, nonetheless col. 1 lines 10-13: "The originality of the invention lies in the integration of existing devices, products, and networks to accomplish a unique service which will making the process of buying and selling significantly more efficient." Col. 7 lines 39-43: "In summary, this process selects the merchant/supplier, confirms the availability of inventory to fulfill the sale, confirms the price, method of payment, and credit status of the consumer as well as the delivery date and method of delivery."

U.S. Pat. No 6,067, 525 claim 40	U.S. Pat. No 6,067,525 claim 40 with Court's claim construction	Gorog U.S. Pat. No. 4,947,028
a plurality of subsystems configured to electronically facilitate actions performed during the sales process; and	a plurality of **[systems that are part of a larger system]** configured to electronically facilitate actions performed during the sales process; and	Col. 2 lines 54-68: "(c) A order computer terminal ("OCT") with means to input data orally, optically, magnetically, electronically, and manually having associated order processing software and communications capabilities

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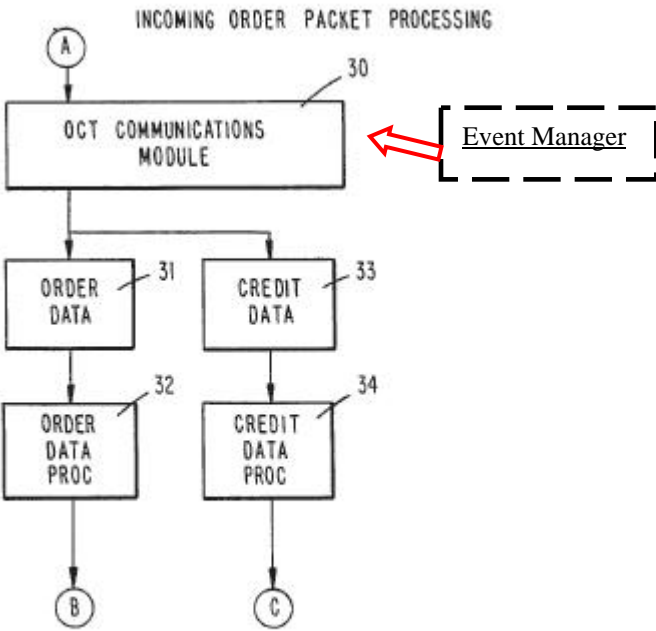| U.S. Pat. No 6,067,525 claim 40	U.S. Pat. No 6,067,525 claim 40 with Court's claim construction	Gorog U.S. Pat. No. 4,947,028
		allowing receipt of communications from the CCS and further providing output communications to the CCS. The CCS can send data to or receive data from the OCT's or from other computer systems, for the purpose of accepting data transmitted from such terminals or other computers over normal telephone lines, radio, television, satellite, or any other signals from remote locations to the CCS. The CCS can also communicate with other computers using accepted industry protocols." Col. 9 lines 8-30: "An automated order and payment [sales] system, which comprises: … A central data processing means with communication capability adapted to receive information from a plurality of remote programmable data input/output means…"
an event manager coupled to the subsystems and configured to detect one or more changes in state characteristic of an event occurring in the system,	[hardware and/or software] coupled to the [systems that are part of a larger system] and configured to detect one or more [a change in a unique configuration of information within the system that is indicative of the occurrence of an event within the system] occurring in the system,	Col. 6 lines 17-29: Referring to FIG. 3, the CCS receives the order packets over a variety of transmission media (e.g., telephone line, optical fiber transmission lines, satellite data link) from OCTs via the <u>OCT communications module [30]</u>. This module contains the hardware and software necessary to <u>receive order</u> and credit information from OCTs when a consumer sends such information. The <u>incoming order packet</u> process causes the order packet data to be divided into order data [31] that is, the information relating to the merchant, identification of the goods or services, and the amount of items desired. This information then is subjected to the order data processing software [32] of the CCS. Col. 2 lines 46-50:

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U.S. Pat. No 6,067, 525 claim 40	U.S. Pat. No 6,067,525 claim 40 with Court's claim construction	Gorog U.S. Pat. No. 4,947,028
		"(a) A central computer system ("CCS") with a variety of programs, processing and storage capability and communications capabilities to allow input and output communications with order computer terminals."
		Col. 2 lines 61-68:
		"The CCS can send data to or receive data from the OCT's or from other computer systems, for the purpose of accepting data transmitted from such terminals or other computers over normal telephone lines, radio, television, satellite, or any other signals from remote locations to the CCS. The CCS can also communicate with other computers using accepted industry protocols."
		Col. 3 lines 1-8:
		"The CCS has various computer software programs that allow product/service order information to be accepted and transmitted from the central computer. Such software will also confirm or deny orders for products based upon records of inventories that have been provided by participating businesses or by sending a query to other computers holding the necessary data records for participating businesses."
		Col. 9 lines 23-26:
		"A central data processing [event manager] means with communication capability [coupled to] adapted to receive information from a plurality of remote programmable data input/output means [subsystems] …"
		Reexamination col. 1 Line 68 – col. 2 lines 1-4:
		"said central data processor [event manager] comprising:… means for receiving [detecting changes in state characteristic of an event] first [from optical reader] and second [from payment card reader] data…"

U.S. Pat. No 6,067, 525 claim 40	U.S. Pat. No 6,067,525 claim 40 with Court's claim construction	Gorog U.S. Pat. No. 4,947,028
infer occurrence of the event and a context in which the event occurred based at least in part on the detected changes in state,	**[logical process by which the fact that the event has occurred is derived by application of logical rules]** and **[logical process by which the fact that information already existing within the system that becomes relevant upon the occurrence of the event is derived by application of logical rules]** based at least in part on the detected changes in state; and	INCOMING ORDER PACKET PROCESSING Event Manager Fig. 3 Col. 6 lines 37-51: "[T]he CCS receives the order packets over a variety of transmission media (e.g., telephone line, optical fiber transmission lines, satellite data link) from OCTs via the OCT communications module [30]. This module contains the hardware and software necessary to receive order and credit information from OCTs when a consumer sends such information. The incoming order packet process causes the order packet data to be divided into order data [31] that is, the information relating to the merchant, identification of the goods or services, and the

U.S. Pat. No 6,067, 525 claim 40	U.S. Pat. No 6,067,525 claim 40 with Court's claim construction	Gorog U.S. Pat. No. 4,947,028
		amount of items desired. This information then is subjected to the order data processing software [32] of the CCS." Reexamination col. 2 lines 1-17: "means for receiving… first and second data…order confirmation [inferring an event] means … subsequent to receipt of payment authorization from the external database…"
link the inferred event with an action to be performed during the sales process based on prior sales experience using the sales system, and	link the inferred event with an action to be performed during the sales process based on prior sales experience using the sales system, and	Reexamination col. 2 lines 18-23: "means for transmitting at least the first data and the payment authorization information to a product/service provider in accordance with the first data, in response to receipt by the central data processor of an order confirmation message from the remote terminal"
automatically initiate an operation using one or more of the plurality of subsystems to facilitate the action to be performed based on the inferred context.	automatically initiating an operation using one or more of the plurality of **[systems that are part of a larger system]** to facilitate the action to be performed based on the inferred context.	Reexamination col. 2 lines 18-23: "means for transmitting at least the first data and the payment authorization information to a product/service provider in accordance with the first data, in response to receipt by the central data processor of an order confirmation message from the remote terminal"

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Stone, Robert W. & Good, David J.: *Expert Systems and Sales Strategies*, **Association of Computer Machinery 089791-416-3, 1990 anticipates asserted Claims 1-3, 5-8, 10, 12, 20, 24, 34, 35, 37 and 40**

U.S. Pat. No 6,067,525 claim 1	U.S. Pat. No 6,067,525 claim 1 with Court's claim construction	Stone, Robert W. & Good, David J.: *Expert Systems and Sales Strategies*
A computer implemented sales system used to facilitate a sales process, the system comprising:	A computer implemented sales system used to facilitate a sales process, the system comprising:	The preamble is not a limitation. The rapid growth of artificial intelligence, and more specifically expert systems, in business has generated a need for investigations concerning computer based intelligence systems within all facets of a business organization." (Introduction, p.52) The focus of this paper is the application of one type of information technology (expert systems) to one point along the business value chain (marketing and sales). (The Theoretical Framework, p. 54) "The expert system provides a comprehensive method to alter marketing and sales strategies (e.g., adjust room rates or promote special packages). In the past, manual systems had no such comprehensive method. Using the expert system, any adjustments in strategy can quickly and comprehensively be made by altering the appropriate parameters in the expert system." (Expert Systems and Sales Strategies, p. 55)
a plurality of subsystems configured to facilitate one or more actions performed during at least one phase of the sales process; and	a plurality of **[systems that are part of a larger system]** configured to facilitate one or more actions performed during at least one phase of the sales process; and	The focus of this paper is the application of one type of information technology (expert systems) to one point along the business value chain (marketing and sales). (The Theoretical Framework, p. 54) "The expert system provides a comprehensive method to alter marketing and sales strategies (e.g., adjust room rates or promote special packages). In the past, manual systems had no such

U.S. Pat. No 6,067,525 claim 1	U.S. Pat. No 6,067,525 claim 1 with Court's claim construction	Stone, Robert W. & Good, David J.: *Expert Systems and Sales Strategies*
		comprehensive method. Using the expert system, any adjustments in strategy can quickly and comprehensively be made by altering the appropriate parameters in the expert system." (Expert Systems and Sales Strategies, p. 55)
an event manager, coupled to the subsystems, the event manager detecting one or more changes in state characteristic of an event occurring within the system	**[hardware and/or software]**, coupled to the **[systems that are part of a larger system]**, the **[hardware and/or software]** detecting one or more **[changes in a unique configuration of information within the system that is indicative of the occurrence of an event within the system]** occurring within the system,	Pages 54-55. When a returning guest calls the hotel to make a reservation, the reservationist enters the individual's name into the reservation system. Using the guest's name, the system produces a display containing the guest's previous stays and their preferences with respect to room characteristics. The reservationist then switches to a second 54 display which is a form to enter the guest's needs. Given the information regarding previous stays and current room preferences and each room's characteristics, the expert system suggests available rooms during the proposed stay of the guest. These suggestions are rooms which best fit the guest's preferences and needs while satisfying the hotel's management and sales strategies. Primary among these sales strategies is to minimize short term (one night) room vacancies.
		The system relies on three factors. First, the continual updated history on each guest and guest stay in the hotel. Second, a complete listing of each room in the hotel and the characteristics of the room. Finally, a listing of the management's operation strategies for the hotel. Among these operation strategies is management's sales strategy for the hotel.
inferring occurrence of the event and a context in which the event occurred based at least in part on the detected changes in state, and	**[logical process by which the fact that the event has occurred is derived by application of logical rules]** and **[logical process by**	"Using the guest's name, the system produces a display containing the guest's previous stays and their preferences with respect to room characteristics. The reservationist then switches to a second display which is a form to enter the guest's needs. Given the information regarding previous stays and current room preferences and each room's

U.S. Pat. No 6,067,525 claim 1	U.S. Pat. No 6,067,525 claim 1 with Court's claim construction	Stone, Robert W. & Good, David J.: *Expert Systems and Sales Strategies*
	which the fact that information already existing within the system that becomes relevant upon the occurrence of the event is derived by application of logical rules] based at least in part on the detected changes in state, and	characteristics, the expert system suggests available rooms during the proposed stay of the guest." (Expert Systems and Sales Strategies, p. 54-55)
automatically initiating an <u>operation</u> in one or more particular subsystems of the computer to facilitate a new action based on the inferred <u>context</u>.	automatically initiating an operation in one or more particular **[systems that are part of a larger system]** of the computer to facilitate a new action based on the inferred context.	"Given the information regarding previous stays and current room preferences and each room's characteristics, the expert system suggests available rooms during the proposed stay of the guest. These suggestions are rooms which best fit the guest's preferences and needs while satisfying the hotel's management and sales strategies." (Expert Systems and Sales Strategies, p. 55)

U.S. Pat. No 6,067,525 claim 2	U.S. Pat. No 6,067,525 claim 2 with Court's claim construction	Stone, Robert W. & Good, David J.: *Expert Systems and Sales Strategies*
A system as recited in claim 1,	A system as recited in claim 1,	[Claim 1 chart incorporated by reference]
wherein the inferred context includes information related to at least one phase of the sales process.	wherein the inferred **[information already existing within the system that becomes relevant upon the occurrence of an event]** includes information related to at least one phase of the sales process.	"Using the guest's name, the system produces a display containing the guest's previous stays and their preferences with respect to room characteristics. The reservationist then switches to a second display which is a form to enter the guest's needs. Given the information regarding previous stays and current room preferences and each room's characteristics, the expert system suggests available rooms during the proposed stay of the guest." (Expert Systems and Sales Strategies, p. 54-55)

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U.S. Pat. No 6,067,525 claim 3	U.S. Pat. No 6,067,525 claim 3 with Court's claim construction	Stone, Robert W. & Good, David J.: *Expert Systems and Sales Strategies*
A system as recited in claim 1,	A system as recited in claim 1,	[Claim 1 chart incorporated by reference]
wherein the inferred context includes information related to whether a previous event has occurred in the sales process.	wherein the inferred **[information already existing within the system that becomes relevant upon the occurrence of an event]** includes information related to whether a previous event has occurred in the sales process.	"Using the guest's name, the system produces a display containing the guest's previous stays and their preferences with respect to room characteristics. The reservationist then switches to a second display which is a form to enter the guest's needs. Given the information regarding previous stays and current room preferences and each room's characteristics, the expert system suggests available rooms during the proposed stay of the guest." (Expert Systems and Sales Strategies, p. 54-55)

U.S. Pat. No 6,067,525 claim 5	U.S. Pat. No 6,067,525 claim 5 with Court's claim construction	Stone, Robert W. & Good, David J.: *Expert Systems and Sales Strategies*
A system as recited in claim 1, wherein the plurality of subsystems comprises:	A system as recited in claim 1, wherein the plurality of **[systems that are parts of a larger system]** comprises:	[Claim 1 chart incorporated by reference]
a time with customer subsystem configured to convert a lead to a buying customer, so as to close a sale; and	a time with customer **[system that is part of a larger system]** configured to convert a lead to a buying customer, so as to close a sale; and	Pages 54-55. When a returning guest calls the hotel to make a reservation, the reservationist enters the individual's name into the <u>reservation system</u>. Using the guest's name, the system produces a display containing the guest's previous stays and their preferences with respect to room characteristics. The reservationist then switches to a second 54 display which is a form to enter the guest's needs. Given the information regarding previous stays and current room preferences and each room's characteristics, the <u>expert system</u> suggests available rooms during the proposed stay of the guest. These suggestions are rooms which best fit the guest's preferences and needs while satisfying the hotel's management and sales strategies. Primary among these sales strategies is to minimize short term (one night) room vacancies.
a lead generation subsystem configured to convert a name to a potential customer.	a lead generation **[system that is a part of a larger system]** configured to convert a name to a potential customer.	Pages 54-55. When a returning guest calls the hotel to make a reservation, the reservationist enters the individual's name into the <u>reservation system</u>. Using the guest's name, the system produces a display containing the guest's previous stays and their preferences with respect to room characteristics. The reservationist then switches to a second 54 display which is a form to enter the guest's needs. Given the information regarding previous stays and current room preferences and each room's characteristics, the <u>expert system</u> suggests available rooms during the proposed stay of the guest. These suggestions are rooms which best fit the guest's preferences and needs while satisfying the hotel's management and sales strategies. Primary among these sales

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U.S. Pat. No 6,067,525 claim 5	U.S. Pat. No 6,067,525 claim 5 with Court's claim construction	Stone, Robert W. & Good, David J.: *Expert Systems and Sales Strategies*
		strategies is to minimize short term (one night) room vacancies.

U.S. Pat. No 6,067,525 claim 6	U.S. Pat. No 6,067,525 claim 6 with Court's claim construction	Stone, Robert W. & Good, David J.: *Expert Systems and Sales Strategies*
A system as recited in claim 1, wherein the plurality of subsystems comprises; [sic]	A system as recited in claim 1, wherein the plurality of **[systems that are parts of a larger system]** comprises; [sic]	[Claim 1 chart incorporated by reference]
a time with customer subsystem configured to convert a lead to a buying customer, so as to close a sale; and	a time with customer **[system that is part of a larger system]** configured to convert a lead to a buying customer, so as to close a sale; and	Pages 54-55. When a returning guest calls the hotel to make a reservation, the reservationist enters the individual's name into the reservation system. Using the guest's name, the system produces a display containing the guest's previous stays and their preferences with respect to room characteristics. The reservationist then switches to a second 54 display which is a form to enter the guest's needs. Given the information regarding previous stays and current room preferences and each room's characteristics, the expert system suggests available rooms during the proposed stay of the guest. These suggestions are rooms which best fit the guest's preferences and needs while satisfying the hotel's management and sales strategies. Primary among these sales strategies is to minimize short term (one night) room vacancies.
an order management subsystem configured to convert the sale such that a product or service delivered matches a product or service sold.	an order management **[system that is part of a larger system]** configured to convert the sale such that a product or service delivered matches a product or service sold.	Pages 54-55. When a returning guest calls the hotel to make a reservation, the reservationist enters the individual's name into the reservation system. Using the guest's name, the system produces a display containing the guest's previous stays and their preferences with respect to room characteristics. The reservationist then switches to a second 54 display which is a form to enter the guest's needs. Given the information regarding previous stays and current room preferences and each room's characteristics, the expert system suggests available rooms during the proposed stay of the guest. These suggestions are rooms which best fit the guest's preferences and needs while satisfying the

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U.S. Pat. No 6,067,525 claim 6	U.S. Pat. No 6,067,525 claim 6 with Court's claim construction	Stone, Robert W. & Good, David J.: *Expert Systems and Sales Strategies*
		hotel's management and sales strategies. Primary among these sales strategies is to minimize short term (one night) room vacancies.

U.S. Pat. No 6,067,525 claim 7	U.S. Pat. No 6,067,525 claim 7 with Court's claim construction	Stone, Robert W. & Good, David J.: *Expert Systems and Sales Strategies*
A system as recited in claim 1, wherein the plurality of subsystems comprises:	A system as recited in claim 1, wherein the plurality of **[systems that are parts of a larger system]** comprises:	[Claim 1 chart incorporated by reference]
a time with customer subsystem configured to convert a lead to a buying customer, so as to close a sale; and	a time with customer **[system that is part of a larger system]** configured to convert a lead to a buying customer, so as to close a sale; and	Pages 54-55. When a returning guest calls the hotel to make a reservation, the reservationist enters the individual's name into the reservation system. Using the guest's name, the system produces a display containing the guest's previous stays and their preferences with respect to room characteristics. The reservationist then switches to a second 54 display which is a form to enter the guest's needs. Given the information regarding previous stays and current room preferences and each room's characteristics, the expert system suggests available rooms during the proposed stay of the guest. These suggestions are rooms which best fit the guest's preferences and needs while satisfying the hotel's management and sales strategies. Primary among these sales strategies is to minimize short term (one night) room vacancies.
a customer retention subsystem configured to convert an existing customer into a lead, so as to generate repeat sales.	a customer retention **[system that is part of a larger system]** configured to convert an existing customer into a lead, so as to generate repeat sales.	Pages 54-55. When a returning guest calls the hotel to make a reservation, the reservationist enters the individual's name into the reservation system. Using the guest's name, the system produces a display containing the guest's previous stays and their preferences with respect to room characteristics. The reservationist then switches to a second 54 display which is a form to enter the guest's needs. Given the information regarding previous stays and current room preferences and each room's characteristics, the expert system suggests available rooms during the proposed stay of the guest. These suggestions are rooms which best fit the guest's preferences and needs while satisfying the hotel's management and sales strategies. Primary among these sales

U.S. Pat. No 6,067,525 claim 7	U.S. Pat. No 6,067,525 claim 7 with Court's claim construction	Stone, Robert W. & Good, David J.: *Expert Systems and Sales Strategies*
		strategies is to minimize short term (one night) room vacancies.

U.S. Pat. No 6,067,525 claim 8	U.S. Pat. No 6,067,525 claim 8 with Court's claim construction	Stone, Robert W. & Good, David J.: *Expert Systems and Sales Strategies*
A system as recited in claim 1, wherein the plurality of subsystems comprises:	A system as recited in claim 1, wherein the plurality of **[systems that are parts of a larger system]** comprises:	[Claim 1 chart incorporated by reference]
a time with customer subsystem configured to convert a lead to a buying customer and prompting the buying customer to make a buying decision, so as to close a sale; and	a time with customer **[system that is part of a larger system]** configured to convert a lead to a buying customer and prompting the buying customer to make a buying decision, so as to close a sale; and	Pages 54-55. When a returning guest calls the hotel to make a reservation, the reservationist enters the individual's name into the reservation system. Using the guest's name, the system produces a display containing the guest's previous stays and their preferences with respect to room characteristics. The reservationist then switches to a second 54 display which is a form to enter the guest's needs. Given the information regarding previous stays and current room preferences and each room's characteristics, the expert system suggests available rooms during the proposed stay of the guest. These suggestions are rooms which best fit the guest's preferences and needs while satisfying the hotel's management and sales strategies. Primary among these sales strategies is to minimize short term (one night) room vacancies.
a self management subsystem configured to assist a salesperson in managing sales information.	a self management **[system that is part of a larger system]** configured to assist a salesperson in managing sales information.	Pages 54-55. When a returning guest calls the hotel to make a reservation, the reservationist enters the individual's name into the reservation system. Using the guest's name, the system produces a display containing the guest's previous stays and their preferences with respect to room characteristics. The reservationist then switches to a second 54 display which is a form to enter the guest's needs. Given the information regarding previous stays and current room preferences and each room's characteristics, the expert system suggests available rooms during the proposed stay of the guest. These suggestions are rooms which best fit the guest's preferences and needs while satisfying the hotel's management and sales strategies. Primary among these sales

U.S. Pat. No 6,067,525 claim 8	U.S. Pat. No 6,067,525 claim 8 with Court's claim construction	Stone, Robert W. & Good, David J.: *Expert Systems and Sales Strategies*
		strategies is to minimize short term (one night) room vacancies.

U.S. Pat. No 6,067,525 claim 10	U.S. Pat. No 6,067,525 claim 10 with Court's claim construction	Stone, Robert W. & Good, David J.: *Expert Systems and Sales Strategies*
A system as recited in claim 1, wherein the plurality of subsystems comprises:	A system as recited in claim 1, wherein the plurality of **[systems that are parts of a larger system]** comprises:	[Claim 1 chart incorporated by reference]
a time with customer subsystem configured to convert a lead to a buying customer, so as to close a sale; and	a time with customer **[system that is part of a larger system]** configured to convert a lead to a buying customer, so as to close a sale; and	Pages 54-55. When a returning guest calls the hotel to make a reservation, the reservationist enters the individual's name into the reservation system. Using the guest's name, the system produces a display containing the guest's previous stays and their preferences with respect to room characteristics. The reservationist then switches to a second 54 display which is a form to enter the guest's needs. Given the information regarding previous stays and current room preferences and each room's characteristics, the expert system suggests available rooms during the proposed stay of the guest. These suggestions are rooms which best fit the guest's preferences and needs while satisfying the hotel's management and sales strategies. Primary among these sales strategies is to minimize short term (one night) room vacancies.
a sales management subsystem configured to assist a sales manager in managing a plurality of salespeople.	a sales management **[system that is part of a larger system]** configured to assist a sales manager in managing a plurality of salespeople.	Pages 54-55. When a returning guest calls the hotel to make a reservation, the reservationist enters the individual's name into the reservation system. Using the guest's name, the system produces a display containing the guest's previous stays and their preferences with respect to room characteristics. The reservationist then switches to a second 54 display which is a form to enter the guest's needs. Given the information regarding previous stays and current room preferences and each room's characteristics, the expert system suggests available rooms during the proposed stay of the guest. These suggestions are rooms which best fit the guest's preferences and needs while satisfying the hotel's management and sales strategies. Primary among these sales

U.S. Pat. No 6,067,525 claim 10	U.S. Pat. No 6,067,525 claim 10 with Court's claim construction	Stone, Robert W. & Good, David J.: *Expert Systems and Sales Strategies*
		strategies is to minimize short term (one night) room vacancies.

U.S. Pat. No 6,067,525 claim 12	U.S. Pat. No 6,067,525 claim 12 with Court's claim construction	Stone, Robert W. & Good, David J.: *Expert Systems and Sales Strategies*
A system as recited in claim 1, wherein the plurality of subsystems comprises:	A system as recited in claim 1, wherein the plurality of **[systems that are parts of a larger system]** comprises:	[Claim 1 chart incorporated by reference]
a lead management subsystem configured to manage a conversion of a lead to a prospect and of the prospect to a buying customer, and	a lead management **[system that is part of a larger system]** configured to manage a conversion of a lead to a prospect and of the prospect to a buying customer, and	Pages 54-55. When a returning guest calls the hotel to make a reservation, the reservationist enters the individual's name into the <u>reservation system</u>. Using the guest's name, the system produces a display containing the guest's previous stays and their preferences with respect to room characteristics. The reservationist then switches to a second 54 display which is a form to enter the guest's needs. Given the information regarding previous stays and current room preferences and each room's characteristics, the <u>expert system</u> suggests available rooms during the proposed stay of the guest. These suggestions are rooms which best fit the guest's preferences and needs while satisfying the hotel's management and sales strategies. Primary among these sales strategies is to minimize short term (one night) room vacancies.
a self management subsystem configured to assist a salesperson in managing sales information.	a self management **[system that is part of a larger system]** configured to assist a salesperson in managing sales information.	Pages 54-55. When a returning guest calls the hotel to make a reservation, the reservationist enters the individual's name into the <u>reservation system</u>. Using the guest's name, the system produces a display containing the guest's previous stays and their preferences with respect to room characteristics. The reservationist then switches to a second 54 display which is a form to enter the guest's needs. Given the information regarding previous stays and current room preferences and each room's characteristics, the <u>expert system</u> suggests available rooms during the proposed stay of the guest. These suggestions are rooms which best fit the guest's preferences and needs while satisfying the

U.S. Pat. No 6,067,525 claim 12	U.S. Pat. No 6,067,525 claim 12 with Court's claim construction	Stone, Robert W. & Good, David J.: *Expert Systems and Sales Strategies*
		hotel's management and sales strategies. Primary among these sales strategies is to minimize short term (one night) room vacancies.

U.S. Pat. No 6,067,525 claim 20	U.S. Pat. No 6,067,525 claim 20 with Court's claim construction	Stone, Robert W. & Good, David J.: *Expert Systems and Sales Strategies*
A method of facilitating a sales process using a computer arrangement having a plurality of subsystems configured to facilitate one or more actions performed during at least one phase of the sales process, the method comprising the steps of:	A method of facilitating a sales process using a computer arrangement having a plurality of **[systems that are part of a larger system]** configured to facilitate one or more actions performed during at least one phase of the sales process, the method comprising the steps of:	The preamble is not a limitation. The rapid growth of artificial intelligence, and more specifically expert systems, in business has generated a need for investigations concerning computer based intelligence systems within all facets of a business organization." (Introduction, p.52) The focus of this paper is the application of one type of information technology (expert systems) to one point along the business value chain (marketing and sales). (The Theoretical Framework, p. 54) "The expert system provides a comprehensive method to alter marketing and sales strategies (e.g., adjust room rates or promote special packages). In the past, manual systems had no such comprehensive method. Using the expert system, any adjustments in strategy can quickly and comprehensively be made by altering the appropriate parameters in the expert system." (Expert Systems and Sales Strategies, p. 55)
automatically detecting one or more changes in state characteristic of an event occurring in the sales process;	automatically detecting one or more **[changes in a unique configuration of information within the system that is indicative of the occurrence of an event within the system]** occurring in the sales	"When a returning guest calls the hotel…the reservationist enters the individual's name into the reservation system. Using the guest's name, the system produces a display containing …" The system relies on three factors. First, the continual updated history on each guest and guest stay in the hotel. Second, a complete listing of each room in the hotel and the characteristics of the room. Finally, a listing of the management's operation strategies for the hotel. Among these operation strategies is management's sales strategy for the hotel.

U.S. Pat. No 6,067,525 claim 20	U.S. Pat. No 6,067,525 claim 20 with Court's claim construction	Stone, Robert W. & Good, David J.: *Expert Systems and Sales Strategies*
	process;	(Expert Systems and Sales Strategies, p. 54)
inferring occurrence of the event and a context in which the event occurred based at least in part on the detected changes in state; and	**[logical process by which the fact that the event has occurred is derived by application of logical rules]** and **[logical process by which the fact that information already existing within the system that becomes relevant upon the occurrence of the event is derived by application of logical rules]** based at least in part on the detected changes in state; and	"Using the guest's name, the system produces a display containing the guest's previous stays and their preferences with respect to room characteristics. The reservationist then switches to a second display which is a form to enter the guest's needs. Given the information regarding previous stays and current room preferences and each room's characteristics, the expert system suggests available rooms during the proposed stay of the guest." (Expert Systems and Sales Strategies, p. 54-55)
automatically initiating an operation in one or more particular subsystems of the computer to facilitate a new action based on the inferred context.	automatically initiating an operation in one or more particular **[systems that are part of a larger system]** of the computer to facilitate a new action based on the inferred context.	Given the information regarding previous stays and current room preferences and each room's characteristics, the expert system suggests available rooms during the proposed stay of the guest. These suggestions are rooms which best fit the guest's preferences and needs while satisfying the hotel's management and sales strategies." (Expert Systems and Sales Strategies, p. 55)

U.S. Pat. No 6,067, 525 claim 24	U.S. Pat. No 6,067,525 claim 24 with Court's claim construction	Stone, Robert W. & Good, David J.: *Expert Systems and Sales Strategies*
A method as recited in claim 20,	A method as recited in claim 20,	[Claim 20 chart incorporated by reference]
wherein the inferred context includes information related to at least one phase of the sales process.	wherein the inferred **[information already existing within the system that becomes relevant upon the occurrence of an event]** includes information related to at least one phase of the sales process.	Pages 54-55. When a returning guest calls the hotel to make a reservation, the reservationist enters the individual's name into the reservation system. Using the guest's name, the system produces a display containing the guest's previous stays and their preferences with respect to room characteristics. The reservationist then switches to a second 54 display which is a form to enter the guest's needs. Given the information regarding previous stays and current room preferences and each room's characteristics, the expert system suggests available rooms during the proposed stay of the guest. These suggestions are rooms which best fit the guest's preferences and needs while satisfying the hotel's management and sales strategies. Primary among these sales strategies is to minimize short term (one night) room vacancies.

The system relies on three factors. First, the continual updated history on each guest and guest stay in the hotel. Second, a complete listing of each room in the hotel and the characteristics of the room. Finally, a listing of the management's operation strategies for the hotel. Among these operation strategies is management's sales strategy for the hotel. |

U.S. Pat. No 6,067, 525 claim 34	U.S. Pat. No 6,067,525 claim 34 with Court's claim construction	Stone, Robert W. & Good, David J.: *Expert Systems and Sales Strategies*
A method as recited in claim 20, further comprising the steps of:	A method as recited in claim 20, further comprising the steps of:	[Claim 20 chart incorporated by reference]
inferring occurrence of an event while converting a lead to a buying customer; and	**[logical process by which the fact that the event has occurred is derived by application of logical rules]** while converting a lead to a buying customer; and	Pages 54-55. When a returning guest calls the hotel to make a reservation, the reservationist enters the individual's name into the <u>reservation system</u>. Using the guest's name, the system produces a display containing the guest's previous stays and their preferences with respect to room characteristics. The reservationist then switches to a second 54 display which is a form to enter the guest's needs. Given the information regarding previous stays and current room preferences and each room's characteristics, the <u>expert system</u> suggests available rooms during the proposed stay of the guest. These suggestions are rooms which best fit the guest's preferences and needs while satisfying the hotel's management and sales strategies. Primary among these sales strategies is to minimize short term (one night) room vacancies. The system relies on three factors. First, the continual updated history on each guest and guest stay in the hotel. Second, a complete listing of each room in the hotel and the characteristics of the room. Finally, a listing of the management's operation strategies for the hotel. Among these operation strategies is management's sales strategy for the hotel.
using the particular subsystem to convert an existing customer into a lead, so as to generate repeat sales.	using the particular **[system that is part of a larger system]** to convert an existing customer into a lead, so as to generate repeat sales.	Pages 54-55. When a returning guest calls the hotel to make a reservation, the reservationist enters the individual's name into the <u>reservation system</u>. Using the guest's name, the system produces a display containing the guest's previous stays and their preferences with respect to room characteristics. The reservationist then switches to a second 54 display which is a form to enter the guest's needs. Given the

U.S. Pat. No 6,067, 525 claim 34	U.S. Pat. No 6,067,525 claim 34 with Court's claim construction	Stone, Robert W. & Good, David J.: *Expert Systems and Sales Strategies*
		information regarding previous stays and current room preferences and each room's characteristics, the <u>expert system</u> suggests available rooms during the proposed stay of the guest. These suggestions are rooms which best fit the guest's preferences and needs while satisfying the hotel's management and sales strategies. Primary among these sales strategies is to minimize short term (one night) room vacancies. The system relies on three factors. First, the continual updated history on each guest and guest stay in the hotel. Second, a complete listing of each room in the hotel and the characteristics of the room. Finally, a listing of the management's operation strategies for the hotel. Among these operation strategies is management's sales strategy for the hotel.

U.S. Pat. No 6,067, 525 claim 35	U.S. Pat. No 6,067,525 claim 35 with Court's claim construction	Stone, Robert W. & Good, David J.: *Expert Systems and Sales Strategies*
A method as recited in claim 20, further comprising the steps of:	A method as recited in claim 20, further comprising the steps of:	[Claim 20 chart incorporated by reference]
inferring occurrence of an event while converting a lead to a buying customer and prompting the buying customer to make a buying decision; and	**[logical process by which the fact that the event has occurred is derived by application of logical rules]** while converting a lead to a buying customer and prompting the buying customer to make a buying decision; and	Pages 54-55. When a returning guest calls the hotel to make a reservation, the reservationist enters the individual's name into the reservation system. Using the guest's name, the system produces a display containing the guest's previous stays and their preferences with respect to room characteristics. The reservationist then switches to a second 54 display which is a form to enter the guest's needs. Given the information regarding previous stays and current room preferences and each room's characteristics, the expert system suggests available rooms during the proposed stay of the guest. These suggestions are rooms which best fit the guest's preferences and needs while satisfying the hotel's management and sales strategies. Primary among these sales strategies is to minimize short term (one night) room vacancies.

The system relies on three factors. First, the continual updated history on each guest and guest stay in the hotel. Second, a complete listing of each room in the hotel and the characteristics of the room. Finally, a listing of the management's operation strategies for the hotel. Among these operation strategies is management's sales strategy for the hotel. |
| using the particular subsystem to assist a salesperson in managing sales information. | using the particular **[system that is part of a larger system]** to assist a salesperson in managing sales information. | Pages 54-55. When a returning guest calls the hotel to make a reservation, the reservationist enters the individual's name into the reservation system. Using the guest's name, the system produces a display containing the guest's previous stays and their preferences with respect to room characteristics. The reservationist then switches to a second 54 display which is a form to enter the guest's needs. Given the |

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U.S. Pat. No 6,067, 525 claim 35	U.S. Pat. No 6,067,525 claim 35 with Court's claim construction	Stone, Robert W. & Good, David J.: *Expert Systems and Sales Strategies*
		information regarding previous stays and current room preferences and each room's characteristics, the <u>expert system</u> suggests available rooms during the proposed stay of the guest. These suggestions are rooms which best fit the guest's preferences and needs while satisfying the hotel's management and sales strategies. Primary among these sales strategies is to minimize short term (one night) room vacancies. The system relies on three factors. First, the continual updated history on each guest and guest stay in the hotel. Second, a complete listing of each room in the hotel and the characteristics of the room. Finally, a listing of the management's operation strategies for the hotel. Among these operation strategies is management's sales strategy for the hotel.

U.S. Pat. No 6,067, 525 claim 37	U.S. Pat. No 6,067,525 claim 37 with Court's claim construction	Stone, Robert W. & Good, David J.: *Expert Systems and Sales Strategies*
A method as recited in claim 20, further comprising the steps of:	A method as recited in claim 20, further comprising the steps of:	[Claim 20 chart incorporated by reference]
inferring occurrence of an event while converting a lead to a buying customer; and	**[logical process by which the fact that the event has occurred is derived by application of logical rules]** while converting a lead to a buying customer; and	Pages 54-55. When a returning guest calls the hotel to make a reservation, the reservationist enters the individual's name into the reservation system. Using the guest's name, the system produces a display containing the guest's previous stays and their preferences with respect to room characteristics. The reservationist then switches to a second 54 display which is a form to enter the guest's needs. Given the information regarding previous stays and current room preferences and each room's characteristics, the expert system suggests available rooms during the proposed stay of the guest. These suggestions are rooms which best fit the guest's preferences and needs while satisfying the hotel's management and sales strategies. Primary among these sales strategies is to minimize short term (one night) room vacancies. The system relies on three factors. First, the continual updated history on each guest and guest stay in the hotel. Second, a complete listing of each room in the hotel and the characteristics of the room. Finally, a listing of the management's operation strategies for the hotel. Among these operation strategies is management's sales strategy for the hotel.
using the particular subsystem to assist a salesperson in managing a plurality of salespeople.	using the particular **[system that is part of a larger system]** to assist a salesperson in managing a plurality of salespeople.	Pages 54-55. When a returning guest calls the hotel to make a reservation, the reservationist enters the individual's name into the reservation system. Using the guest's name, the system produces a display containing the guest's previous stays and their preferences with respect to room characteristics. The reservationist then switches to a second 54 display which is a form to enter the guest's needs. Given the

U.S. Pat. No 6,067, 525 claim 37	U.S. Pat. No 6,067,525 claim 37 with Court's claim construction	Stone, Robert W. & Good, David J.: *Expert Systems and Sales Strategies*
		information regarding previous stays and current room preferences and each room's characteristics, the <u>expert system</u> suggests available rooms during the proposed stay of the guest. These suggestions are rooms which best fit the guest's preferences and needs while satisfying the hotel's management and sales strategies. Primary among these sales strategies is to minimize short term (one night) room vacancies. The system relies on three factors. First, the continual updated history on each guest and guest stay in the hotel. Second, a complete listing of each room in the hotel and the characteristics of the room. Finally, a listing of the management's operation strategies for the hotel. Among these operation strategies is management's sales strategy for the hotel.

U.S. Pat. No 6,067, 525 claim 40	U.S. Pat. No 6,067,525 claim 40 with Court's claim construction	Stone, Robert W. & Good, David J.: *Expert Systems and Sales Strategies*
A computer implemented sales system used to facilitate a sales process, the system comprising:	A computer implemented sales system used to facilitate a sales process, the system comprising:	The preamble is not a limitation. The rapid growth of artificial intelligence, and more specifically expert systems, in business has generated a need for investigations concerning computer based intelligence systems within all facets of a business organization." (Introduction, p.52) The focus of this paper is the application of one type of information technology (expert systems) to one point along the business value chain (marketing and sales). (The Theoretical Framework, p. 54) "The expert system provides a comprehensive method to alter marketing and sales strategies (e.g., adjust room rates or promote special packages). In the past, manual systems had no such comprehensive method. Using the expert system, any adjustments in strategy can quickly and comprehensively be made by altering the appropriate parameters in the expert system." (Expert Systems and Sales Strategies, p. 55)
a plurality of subsystems configured to electronically facilitate actions performed during the sales process; and	a plurality of **[systems that are part of a larger system]** configured to electronically facilitate actions performed during the sales process; and	The focus of this paper is the application of one type of information technology (expert systems) to one point along the business value chain (marketing and sales). (The Theoretical Framework, p. 54) "The expert system provides a comprehensive method to alter marketing and sales strategies (e.g., adjust room rates or promote special packages). In the past, manual systems had no such comprehensive method. Using the expert system, any adjustments in strategy can quickly and comprehensively be made by altering the

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U.S. Pat. No 6,067, 525 claim 40	U.S. Pat. No 6,067,525 claim 40 with Court's claim construction	Stone, Robert W. & Good, David J.: *Expert Systems and Sales Strategies*
		appropriate parameters in the expert system." (Expert Systems and Sales Strategies, p. 55)
an event manager coupled to the subsystems and configured to detect one or more changes in state characteristic of an event occurring in the system,	**[hardware and/or software]** coupled to the **[systems that are part of a larger system]** and configured to detect one or more **[a change in a unique configuration of information within the system that is indicative of the occurrence of an event within the system** occurring in the system,	Pages 54-55. When a returning guest calls the hotel to make a reservation, the reservationist enters the individual's name into the <u>reservation system</u>. Using the guest's name, the system produces a display containing the guest's previous stays and their preferences with respect to room characteristics. The reservationist then switches to a second 54 display which is a form to enter the guest's needs. Given the information regarding previous stays and current room preferences and each room's characteristics, the <u>expert system</u> suggests available rooms during the proposed stay of the guest. These suggestions are rooms which best fit the guest's preferences and needs while satisfying the hotel's management and sales strategies. Primary among these sales strategies is to minimize short term (one night) room vacancies.
infer occurrence of the event and a context in which the event occurred based at least in part on the detected changes in state,	**[logical process by which the fact that the event has occurred is derived by application of logical rules]** and **[logical process by which the fact that information already existing within the system that becomes relevant upon the occurrence of the event is derived by application of logical rules]** based at least in part on the detected	"Using the guest's name, the system produces a display containing the guest's previous stays and their preferences with respect to room characteristics. The reservationist then switches to a second display which is a form to enter the guest's needs. Given the information regarding previous stays and current room preferences and each room's characteristics, the expert system suggests available rooms during the proposed stay of the guest." (Expert Systems and Sales Strategies, p. 54-55)

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U.S. Pat. No 6,067, 525 claim 40	U.S. Pat. No 6,067,525 claim 40 with Court's claim construction	Stone, Robert W. & Good, David J.: *Expert Systems and Sales Strategies*
	changes in state; and	
link the inferred event with an action to be performed during the sales process based on prior sales experience using the sales system, and	link the inferred event with an action to be performed during the sales process based on prior sales experience using the sales system, and	"Using the guest's name, the system produces a display containing the guest's previous stays and their preferences with respect to room characteristics. The reservationist then switches to a second display which is a form to enter the guest's needs. Given the information regarding previous stays and current room preferences and each room's characteristics, the expert system suggests available rooms during the proposed stay of the guest." (Expert Systems and Sales Strategies, p. 54-55)
automatically initiate an operation using one or more of the plurality of subsystems to facilitate the action to be performed based on the inferred context.	automatically initiating an operation using one or more of the plurality of **[systems that are part of a larger system]** to facilitate the action to be performed based on the inferred context.	The system relies on three factors. First, the continual updated history on each guest and guest stay in the hotel. Second, a complete listing of each room in the hotel and the characteristics of the room. Finally, a listing of the management's operation strategies for the hotel. Among these operation strategies is management's sales strategy for the hotel. (Expert Systems and Sales Strategies, p. 54) "Given the information regarding previous stays and current room preferences and each room's characteristics, the expert system suggests available rooms during the proposed stay of the guest. These suggestions are rooms which best fit the guest's preferences and needs while satisfying the hotel's management and sales strategies." (Expert Systems and Sales Strategies, p. 55)

Spezialetti, Madalene: *An Approach to Reducing Delays in Recognizing Distributed Event Occurrences*, **Association of Computer Machinery 0-89791-457-0/91/0011/0155 renders all claims obvious, either alone or in combination with other references herein**

U.S. Pat. No 6,067,525 claim 1	U.S. Pat. No 6,067,525 claim 1 with Court's claim construction	Spezialetti, Madalene: *An Approach to Reducing Delays in Recognizing Distributed Event Occurrences*
A computer implemented sales system used to facilitate a sales process, the system comprising:	A computer implemented sales system used to facilitate a sales process, the system comprising:	The preamble is not a limitation.
a plurality of <u>subsystems</u> configured to facilitate one or more actions performed during at least one phase of the sales process; and	a plurality of **[systems that are part of a larger system]** configured to facilitate one or more actions performed during at least one phase of the sales process; and	Pages 156. At each processor at which a component of a particular event is located is an *event monitor*. This monitor will maintain information pertaining to the states of each component of the event which is located at that processor.
an event manager, coupled to the subsystems, the event manager <u>detecting one or more changes in state</u> characteristic of an event occurring within the system	**[hardware and/or software]**, coupled to the **[systems that are part of a larger system]**, the **[hardware and/or software]** detecting one or more **[changes in a unique configuration of information within the system that is indicative of the occurrence of an event within the system]** occurring within the system,	Page 155. "One approach to aid in this analysis allows users to describe activity of interest in the form of event definitions. These definitions are predicates which test the states of various system elements. The activity of the elements specified by an event definition is monitored, and data pertaining to their activity collected for analysis. This data is organized into a view of the computation state, and the <u>event definition is evaluated in terms of the states of its operands</u>. An event occurs at the point that the behavior of the computation fulfills the specification of its definition, that is, at the point that the application of the definition's operators to the states of the operands would yield a TRUE result. An occurrence of the event is recognized at the point that the monitoring system detects its occurrence." Page 156. "an *event definition* is a description of the activity which is

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U.S. Pat. No 6,067,525 claim 1	U.S. Pat. No 6,067,525 claim 1 with Court's claim construction	Spezialetti, Madalene: *An Approach to Reducing Delays in Recognizing Distributed Event Occurrences*
		to be <u>detected</u> by a monitoring system."
		Page 156. "An event definition, is assumed to be a predicate whose operands, or *components*, are combined or <u>tested</u> using relational, logical or temporal operators."
		Page 156. "In order to recognize an event occurrence, data regarding the states of the components must be collected and <u>evaluated</u>."
		Page 157. "Associated with each process is a *component monitor*, which is responsible for <u>detecting changes</u> to the monitored components within that process and, when an alteration occurs to a component, transmitting the value of that alteration to the appropriate event monitor."
		Page 162. "When a <u>change</u> occurs to a monitored component in a region, *r*, which may result in an occurrence of an event, the component's event monitor is informed of the charge."
<u>inferring occurrence of the event</u> and a context in which the event occurred based at least in part on the detected changes in state, and	**[logical process by which the fact that the event has occurred is derived by application of logical rules]** and **[logical process by which the fact that information already existing within the system that becomes relevant upon the occurrence of the event is derived by application of logical rules]** based at least in part on the detected	Page 155. "One approach to aid in this analysis allows users to describe activity of interest in the form of event definitions. These definitions are predicates which test the states of various system elements. The activity of the elements specified by an event definition is monitored, and data pertaining to their activity collected for analysis. This data is organized into a view of the computation state, and the event definition is evaluated in terms of the states of its operands. <u>An event occurs at the point that the behavior of the computation fulfills the specification of its definition</u>, that is, at the point that the application of the definition's operators to the states of the operands would yield a TRUE result. <u>An occurrence of the event is recognized at the point that the monitoring system detects its occurrence</u>." Page 157. "An evaluation monitor may be assigned the task of

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U.S. Pat. No 6,067,525 claim 1	U.S. Pat. No 6,067,525 claim 1 with Court's claim construction	Spezialetti, Madalene: *An Approach to Reducing Delays in Recognizing Distributed Event Occurrences*
	changes in state, and	evaluating an entire event or some portion of an event and is responsible for accumulating and organizing the data which is required to perform the evaluation and potentially <u>make recognitions</u>. … [W]henever discussing the assignment of evaluation responsibilities, the module will be referred to as an evaluation monitor, although it may serve as an event monitor as well." Page 165. "[A] technique was presented to determine if an Immediate <u>recognition of an event's occurrence</u> could be guaranteed via the placement of evolution monitors based on the characteristics of an event's operators."
automatically initiating an operation in one or more particular subsystems of the computer to facilitate a new action based on the inferred context.	automatically initiating an operation in one or more particular **[systems that are part of a larger system]** of the computer to facilitate a new action based on the inferred context.	

U.S. Pat. No 6,067,525 claim 20	U.S. Pat. No 6,067,525 claim 20 with Court's claim construction	Spezialetti, Madalene: *An Approach to Reducing Delays in Recognizing Distributed Event Occurrences*
A method of facilitating a sales process using a computer arrangement having a plurality of subsystems configured to facilitate one or more actions performed during at least one phase of the sales process, the method comprising the steps of:	A method of facilitating a sales process using a computer arrangement having a plurality of **[systems that are part of a larger system]** configured to facilitate one or more actions performed during at least one phase of the sales process, the method comprising the steps of:	The preamble is not a limitation. Nonetheless, Pages 156. At each processor at which a component of a particular event is located is an *event monitor*. This monitor will maintain information pertaining to the states of each component of the event which is located at that processor.
automatically detecting one or more changes in state characteristic of an event occurring in the sales process;	automatically detecting one or more **[changes in a unique configuration of information within the system that is indicative of the occurrence of an event within the system]** occurring in the sales process;	Page 155. "One approach to aid in this analysis allows users to describe activity of interest in the form of event definitions. These definitions are predicates which test the states of various system elements. The activity of the elements specified by an event definition is monitored, and data pertaining to their activity collected for analysis. This data is organized into a view of the computation state, and the event definition is evaluated in terms of the states of its operands. An event occurs at the point that the behavior of the computation fulfills the specification of its definition, that is, at the point that the application of the definition's operators to the states of the operands would yield a TRUE result. An occurrence of the event is recognized at the point that the monitoring system detects its occurrence." Page 156. "an *event definition* is a description of the activity which is to be detected by a monitoring system." Page 156. "An event definition, is assumed to be a predicate whose operands, or *components*, are combined or tested using relational,

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U.S. Pat. No 6,067,525 claim 20	U.S. Pat. No 6,067,525 claim 20 with Court's claim construction	Spezialetti, Madalene: *An Approach to Reducing Delays in Recognizing Distributed Event Occurrences*
		logical or temporal operators."
		Page 156. "In order to recognize an event occurrence, data regarding the states of the components must be collected and <u>evaluated</u>."
		Page 157. "Associated with each process is a *component monitor*, which is responsible for <u>detecting changes</u> to the monitored components within that process and, when an alteration occurs to a component, transmitting the value of that alteration to the appropriate event monitor."
		Page 162. "When a <u>change</u> occurs to a monitored component in a region, *r*, which may result in an occurrence of an event, the component's event monitor is informed of the charge."
inferring occurrence of the event and a context in which the event occurred based at least in part on the detected changes in state; and	**[logical process by which the fact that the event has occurred is derived by application of logical rules]** and **[logical process by which the fact that information already existing within the system that becomes relevant upon the occurrence of the event is derived by application of logical rules]** based at least in part on the detected changes in state; and	Page 155. "One approach to aid in this analysis allows users to describe activity of interest in the form of event definitions. These definitions are predicates which test the states of various system elements. The activity of the elements specified by an event definition is monitored, and data pertaining to their activity collected for analysis. This data is organized into a view of the computation state, and the event definition is evaluated in terms of the states of its operands. <u>An event occurs at the point that the behavior of the computation fulfills the specification of its definition</u>, that is, at the point that the application of the definition's operators to the states of the operands would yield a TRUE result. <u>An occurrence of the event is recognized at the point that the monitoring system detects its occurrence</u>." Page 157. "An evaluation monitor may be assigned the task of evaluating an entire event or some portion of an event and is responsible for accumulating and organizing the data which is required to perform the evaluation and potentially <u>make recognitions</u>. … [W]henever discussing the assignment of evaluation responsibilities,

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U.S. Pat. No 6,067,525 claim 20	U.S. Pat. No 6,067,525 claim 20 with Court's claim construction	Spezialetti, Madalene: *An Approach to Reducing Delays in Recognizing Distributed Event Occurrences*
		the module will be referred to as an evaluation monitor, although it may serve as an event monitor as well." Page 165. "[A] technique was presented to determine if an Immediate recognition of an event's occurrence could be guaranteed via the placement of evolution monitors based on the characteristics of an event's operators."
automatically initiating an operation in one or more particular subsystems of the computer to facilitate a new action based on the inferred context.	automatically initiating an operation in one or more particular **[systems that are part of a larger system]** of the computer to facilitate a new action based on the inferred context.	

U.S. Pat. No 6,067, 525 claim 40	U.S. Pat. No 6,067,525 claim 40 with Court's claim construction	Spezialetti, Madalene: *An Approach to Reducing Delays in Recognizing Distributed Event Occurrences*
A computer implemented sales system used to facilitate a sales process, the system comprising:	A computer implemented sales system used to facilitate a sales process, the system comprising:	The preamble is not a limitation.
a plurality of subsystems configured to electronically facilitate actions performed during the sales process; and	a plurality of [systems that are part of a larger system] configured to electronically facilitate actions performed during the sales process; and	Pages 156. At each processor at which a component of a particular event is located is an *event monitor*. This monitor will maintain information pertaining to the states of each component of the event which is located at that processor.
an event manager coupled to the subsystems and configured to detect one or more changes in state characteristic of an event occurring in the system,	[hardware and/or software] coupled to the [systems that are part of a larger system] and configured to detect one or more [a change in a unique configuration of information within the system that is indicative of the occurrence of an event within the system** occurring in the system,	Page 155. "One approach to aid in this analysis allows users to describe activity of interest in the form of event definitions. These definitions are predicates which test the states of various system elements. The activity of the elements specified by an event definition is monitored, and data pertaining to their activity collected for analysis. This data is organized into a view of the computation state, and the event definition is evaluated in terms of the states of its operands. An event occurs at the point that the behavior of the computation fulfills the specification of its definition, that is, at the point that the application of the definition's operators to the states of the operands would yield a TRUE result. An occurrence of the event is recognized at the point that the monitoring system detects its occurrence." Page 156. "an *event definition* is a description of the activity which is to be detected by a monitoring system." Page 156. "An event definition, is assumed to be a predicate whose operands, or *components*, are combined or tested using relational, logical or temporal operators."

U.S. Pat. No 6,067, 525 claim 40	U.S. Pat. No 6,067,525 claim 40 with Court's claim construction	Spezialetti, Madalene: *An Approach to Reducing Delays in Recognizing Distributed Event Occurrences*
		Page 156. "In order to recognize an event occurrence, data regarding the states of the components must be collected and <u>evaluated</u>." Page 157. "Associated with each process is a *component monitor*, which is responsible for <u>detecting changes</u> to the monitored components within that process and, when an alteration occurs to a component, transmitting the value of that alteration to the appropriate event monitor." Page 162. "When a <u>change</u> occurs to a monitored component in a region, *r*, which may result in an occurrence of an event, the component's event monitor is informed of the charge."
infer occurrence of the event and a context in which the event occurred based at least in part on the detected changes in state,	**[logical process by which the fact that the event has occurred is derived by application of logical rules]** and **[logical process by which the fact that information already existing within the system that becomes relevant upon the occurrence of the event is derived by application of logical rules]** based at least in part on the detected changes in state; and	Page 155. "One approach to aid in this analysis allows users to describe activity of interest in the form of event definitions. These definitions are predicates which test the states of various system elements. The activity of the elements specified by an event definition is monitored, and data pertaining to their activity collected for analysis. This data is organized into a view of the computation state, and the event definition is evaluated in terms of the states of its operands. <u>An event occurs at the point that the behavior of the computation fulfills the specification of its definition</u>, that is, at the point that the application of the definition's operators to the states of the operands would yield a TRUE result. <u>An occurrence of the event is recognized at the point that the monitoring system detects its occurrence</u>." Page 157. "An evaluation monitor may be assigned the task of evaluating an entire event or some portion of an event and is responsible for accumulating and organizing the data which is required to perform the evaluation and potentially <u>make recognitions</u>. … [W]henever discussing the assignment of evaluation responsibilities, the module will be referred to as an evaluation monitor, although it may

U.S. Pat. No 6,067, 525 claim 40	U.S. Pat. No 6,067,525 claim 40 with Court's claim construction	Spezialetti, Madalene: *An Approach to Reducing Delays in Recognizing Distributed Event Occurrences*
		serve as an event monitor as well." Page 165. "[A] technique was presented to determine if an Immediate recognition of an event's occurrence could be guaranteed via the placement of evolution monitors based on the characteristics of an event's operators."
link the inferred event with an action to be performed during the sales process based on prior sales experience using the sales system, and	link the inferred event with an action to be performed during the sales process based on prior sales experience using the sales system, and	
automatically initiate an operation using one or more of the plurality of subsystems to facilitate the action to be performed based on the inferred context.	automatically initiating an operation using one or more of the plurality of **[systems that are part of a larger system]** to facilitate the action to be performed based on the inferred context.	